

Jaguar Animal Health, Inc.
Form S-4/A
April 20, 2017

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)

[Jaguar Animal Health, Inc. Index to Financial Statements](#)

[Napo Pharmaceuticals, Inc. Index to Consolidated Financial Statements](#)

[Table of Contents](#)

As filed with the Securities and Exchange Commission on April 20, 2017

Registration No. 333-217364

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1
to

FORM S-4 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

JAGUAR ANIMAL HEALTH, INC.

(Exact name of Registrant as specified in its charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

2834
(Primary Standard Industrial
Classification Code Number)
201 Mission Street, Suite 2375
San Francisco, California 94105
(415) 371-8300

46-2956775
(I.R.S. Employer
Identification No.)

(Address, Including Zip Code, and Telephone Number, Including
Area Code, of Registrant's Principal Executive Offices)

Lisa A. Conte
Chief Executive Officer and President
Jaguar Animal Health, Inc.
201 Mission Street, Suite 2375
San Francisco, California 94105
(415) 371-8300

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copies of all correspondence to:

**Donald C. Reinke, Esq.
David T. Mittelman, Esq.
Reed Smith LLP
1510 Page Mill Road, Suite 110
Palo Alto, California 94304
(650) 352-0500**

**Approximate date of commencement of proposed sale of the securities to the public:
As soon as practicable after the effectiveness of this registration statement and the satisfaction or waiver of all other conditions under
the merger agreement described herein.**

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a
smaller reporting company) Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

If applicable, please an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13c-4(i) (Cross-Border Issuer Tender Offer)

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer)

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

The purpose of this Amendment No. 1 to the Registration Statement on Form S-4 (333-217364), or the Registration Statement, is to correct certain typographical errors in the initial Registration Statement filed April 18, 2017, including within the unaudited pro forma financial statements and the number of existing authorized shares of Jaguar common stock.

Table of Contents

The information in this joint proxy statement/prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This joint proxy statement/prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer, solicitation or sale is not permitted.

Subject to completion, dated April 20, 2017

[•], 2017

Dear Stockholders of Jaguar Animal Health, Inc. and Napo Pharmaceuticals, Inc.,

We are pleased to enclose the joint proxy statement/prospectus relating to the acquisition of Napo Pharmaceuticals, Inc. (sometimes referred to as Napo) by Jaguar Animal Health, Inc. (sometimes referred to as Jaguar) through a merger. We believe that this merger will enable both companies, through a joint management team, to enhance potential value for stockholders, and that both Jaguar and Napo will benefit from the synergies and economies of scale that a merger should create in manufacturing and commercialization of crofelemer for various human and animal indications.

At the effective time of the merger, (i) each issued and outstanding share of Napo common stock (other than dissenting shares and shares held by Jaguar or Napo) will be converted into a contingent right to receive (x) up to a whole number of shares of Jaguar common stock comprising in the aggregate up to approximately 21.5% of the fully diluted shares of Jaguar common stock immediately following the consummation of the merger, which contingent right will vest only if the resale of certain shares of Jaguar common stock (sometimes referred to herein as the Tranche A Shares) issued by Jaguar to Nantucket Investments Limited (sometimes referred to herein as Nantucket) pursuant to the Napo debt settlement provides Nantucket with specified cash returns over a specified period of time (sometimes referred to herein as the Hurdle Amounts), and (y) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, additional shares of the Jaguar common stock (equal to 50% of the unsold Tranche A shares), which will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units, (ii) existing creditors of Napo (inclusive of Nantucket) will be issued in the aggregate approximately 43,156,649 shares of Jaguar non-voting common stock and 2,005,245 shares of Jaguar voting common stock in full satisfaction of all existing indebtedness then owed by Napo to such creditors, and (iii) an existing Napo stockholder (sometimes referred to herein as Invesco) will be issued an aggregate of approximately 3,243,243 shares of Jaguar common stock in return for \$3 million of new funds invested into Jaguar by such investor, which will be immediately loaned to Napo to partially facilitate the extinguishment of the debt that Napo owes to Nantucket.

Shares of Jaguar non-voting common stock have the same rights to dividends and other distributions and are convertible into shares of common stock on a one-for-one basis (x) upon transfers to non-affiliates of Nantucket, (y) upon the release from escrow of certain non-voting shares held by Nantucket to the legacy stockholders of Napo under specified conditions and (z) at any time on or after April 1, 2018 at the option of the respective holders thereof.

Jaguar will also assume (i) each outstanding and unexercised option to purchase Napo common stock, which will be converted into options to purchase Jaguar common stock, (ii) each outstanding warrant to purchase Napo common stock, which will be converted into warrants to purchase Jaguar common stock, and (iii) each outstanding restricted stock unit to acquire Napo common stock, which will be converted into restricted stock units to acquire Jaguar common stock.

The stockholders of Jaguar will continue to own their existing shares and the rights and privileges of their existing shares will not be affected by the merger. However, because Jaguar will be issuing new shares of Jaguar common stock and non-voting common stock to Napo creditors, and options, warrants and restricted stock units exercisable for Jaguar common stock to holders of Napo options, warrants and restricted stock units in the merger, the stockholders of Jaguar will experience dilution as a result of the issuance of shares in the merger and each outstanding share of Jaguar common stock immediately prior to the merger will represent a smaller percentage of the total number of shares of Jaguar common stock and non-voting common stock issued and outstanding after the merger. It is expected that Jaguar stockholders before the merger will hold approximately 25% of the total Jaguar common stock and non-voting common stock issued and outstanding on a fully diluted basis immediately following completion of the merger. Thus, Jaguar stockholders before the merger will experience dilution in the amount of approximately 75% as a result of the merger.

We estimate that Jaguar may issue up to an aggregate of approximately 69,299,346 shares of its common stock and non-voting common stock to Napo creditors, noteholders, holders of Napo warrants, options or restricted stock units, and Invesco (sometimes referred to herein collectively as the Napo Stakeholders) as contemplated by the merger agreement. Immediately following completion of the merger, Jaguar stockholders immediately prior to the merger will own approximately 25% of Jaguar's outstanding common stock and non-voting common stock and the Napo Stakeholders will own approximately 75% of Jaguar's outstanding common stock and non-voting common stock, in each case calculated based on a fully diluted basis of Jaguar as of March 31, 2017, assuming the exercise or conversion of all outstanding options and warrants other than those options and warrants exercisable or convertible for approximately 300,000 shares of Jaguar common stock with an exercise/conversion price of \$5.00 or more. Jaguar's common stock will continue to be listed on The NASDAQ Capital Market

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

under the symbol "JAGX", subject to NASDAQ's determination on delisting. See "Risk Factors Risks Related to Ownership of Jaguar's Common Stock Jaguar's failure to meet the continued listing requirements of The NASDAQ Capital Market could result in a delisting of its common stock." Jaguar's non-voting common stock will not be listed on any stock exchange.

Jaguar stockholders are cordially invited to attend Jaguar's special meeting of stockholders to be held at 201 Mission Street, Suite 2375, San Francisco, CA 94105 on [•], 2017 at [•] a.m., local time, at which time the holders of Jaguar common stock will be asked to consider and vote upon proposals related to the merger including (i) a proposal to approve the issuance of Jaguar common stock and non-voting common stock to certain of Napo's existing creditors in connection with the proposed merger, (ii) a proposal to approve the issuance of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019, issued or issuable by Napo to certain investors in the original principal amount of up to \$12,500,000, as amended on March 31, 2017, (iii) a proposal to approve the issuance of \$3,000,000 of Jaguar common stock at a price equal to \$0.925 per share to Invesco Asset Management Limited, or Invesco, pursuant to the Commitment Letter, dated February 21, 2017, between Jaguar and Invesco (sometimes referred to herein as the Invesco Commitment Letter), (iv) a proposal to amend the Jaguar 2014 Stock Incentive Plan (sometimes referred to herein as the 2014 Plan) to increase the number of shares of Jaguar common stock authorized for issuance under the 2014 Plan by 6,500,188 shares, (v) a proposal to adopt Jaguar's Third Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 50 million shares to 225 million shares, authorize a class of non-voting common stock, require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and change the Jaguar corporate name to "Jaguar Health, Inc.", and (vi) a proposal to adjourn Jaguar's special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to approve the above matters.

Napo stockholders are cordially invited to attend a special meeting of the stockholders to be held at 201 Mission Street, Suite 2375, San Francisco, CA 94105 on [•], 2017 at [•], a.m., local time, at which time the stockholders of Napo will be asked to consider and vote upon (i) a proposal to adopt the merger agreement and approve the merger and (ii) a proposal to adjourn Napo's special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to adopt the merger agreement and approve the merger.

We urge you to read the enclosed joint proxy statement/prospectus, which includes important information about the merger, Jaguar's special meeting and Napo's special meeting. **In particular, see "Risk Factors" beginning on page 24 of the joint proxy statement/prospectus for a description of the risks that you should consider in evaluating the merger.**

Jaguar's board of directors (sometimes referred to as the Jaguar Board) unanimously recommends that Jaguar stockholders vote "FOR" the issuance of the shares of common stock and non-voting common stock, "FOR" the issuance of shares of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019, "FOR" the proposal respecting the issuance of shares of Jaguar common stock to Invesco, "FOR" the amendment of the 2014 Plan, "FOR" the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation, and "FOR" the other matters to be considered at the Jaguar special meeting.

Napo's board of directors (sometimes referred to as the Napo Board) unanimously recommends that Napo stockholders vote "FOR" the adoption of the merger agreement and "FOR" the other matters to be considered at the Napo special meeting. It should be noted that in connection with the merger, the Napo Board will receive indemnification for acts or omissions occurring prior to the effective time of the merger.

Your vote is very important. Whether or not you plan to attend your respective company's meeting of stockholders, please submit your proxy as soon as possible to make sure that your shares are represented at that meeting. Information about these meetings, the merger and the other business to be considered by stockholders is contained in this joint proxy statement/prospectus. We urge you to read this joint proxy statement/prospectus carefully.

Sincerely,

/s/ LISA A. CONTE

Lisa A. Conte
Chief Executive Officer and President
Jaguar Animal Health, Inc.
Interim Chief Executive Officer
Napo Pharmaceuticals, Inc.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities to be issued in connection with the merger or determined if this joint proxy statement/prospectus is accurate or complete. Any representation to the contrary is a criminal offense.

The enclosed joint proxy statement/prospectus is dated [•], 2017, and is first being mailed or otherwise delivered to stockholders of Jaguar and Napo on or about [•], 2017.

Table of Contents

JAGUAR ANIMAL HEALTH, INC.

201 Mission Street

Suite 2375

San Francisco, CA 94105

NOTICE OF 2017 SPECIAL MEETING OF STOCKHOLDERS

TO BE HELD [•], 2017

To the Stockholders of Jaguar Animal Health, Inc.:

Jaguar Animal Health, Inc.'s special meeting of all stockholders will be held at 201 Mission Street, Suite 2375, San Francisco, CA 94105 on [•], 2017 at [•] a.m., local time, for the following purposes:

1. To approve the issuance of shares of Jaguar common stock and non-voting common stock in connection with the transactions contemplated by the Agreement and Plan of Merger, dated as of March 31, 2017, by and among Jaguar Animal Health, Inc., Napo Acquisition Corporation, Napo Pharmaceuticals, Inc. and a representative of Napo Pharmaceuticals, Inc. (sometimes referred to as the merger agreement). A copy of the merger agreement has been included as *Annex A* to this joint proxy statement/prospectus.
2. To approve the issuance of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019, issued or issuable by Napo to certain investors in the original principal amount of up to \$12,500,000, as amended on March 31, 2017.
3. To approve the issuance of \$3,000,000 of Jaguar common stock at a price equal to \$0.925 per share to Invesco Asset Management Limited, or Invesco, pursuant to the Commitment Letter, dated February 21, 2017, between Jaguar and Invesco (sometimes referred to herein as the Invesco Commitment Letter).
4. To approve the amendment of the Jaguar 2014 Stock Incentive Plan (sometimes referred to herein as the 2014 Plan) to increase the number of shares of Jaguar common stock authorized for issuance under the 2014 Plan by 6,500,188 shares.
5. To approve Jaguar's Third Amended and Restated Certificate of Incorporation to (i) increase the number of authorized shares of common stock from 50 million shares to 225 million shares, (ii) authorize a class of non-voting common stock, (iii) require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and (iv) change the Jaguar corporate name to "Jaguar Health, Inc." A copy of Jaguar's Third Amended and Restated Certificate of Incorporation has been included as *Annex B* to this joint proxy statement/prospectus.
6. To adjourn the special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to approve (i) the issuance of shares of Jaguar common stock described in Proposals 1, 2 and 3, (ii) the amendment of the 2014 Plan described in Proposal 4, and/or (iii) the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation described in Proposal 5.
7. To transact such other business as may properly come before the special meeting or any adjournment or postponement thereof.

If you held shares of Jaguar common stock at the close of business on [•], 2017, you are entitled to notice of and to vote at the special meeting and any adjournments or postponements thereof. If a new record date is set, you will be entitled to vote at the special meeting if you held shares in Jaguar as of such record date.

The Jaguar Board unanimously recommends that you vote "FOR" all of these proposals, which are described in detail in the accompanying joint proxy statement/prospectus. Your attention is

Table of Contents

directed to the accompanying joint proxy statement/prospectus for a discussion of the merger and the merger agreement, as well as the other matters that will be considered at the meeting.

Your vote is very important. Approval of each of Proposals 1, 2, 3, 4 and 5 by the Jaguar stockholders is integral to the completion of the merger. If you do not submit your proxy by telephone, the Internet, or return your signed proxy card(s) by mail or vote in person at the special meeting, it will be more difficult for Jaguar to obtain the necessary quorum to hold its special meeting.

Whether or not you plan to attend the special meeting in person, please complete, sign, date and return the enclosed proxy in the accompanying self-addressed postage pre-paid envelope or complete your proxy by following the instructions supplied on the proxy card for voting by telephone or via the Internet (or, if your shares are held in "street name" by a broker, nominee, fiduciary or other custodian, follow the directions given by the broker, nominee, fiduciary or other custodian regarding how to instruct it to vote your shares) as soon as possible. If you attend the special meeting, you may withdraw your proxy and vote in person.

**IMPORTANT NOTICE REGARDING THE INTERNET AVAILABILITY
OF PROXY MATERIALS FOR THE JAGUAR 2017 SPECIAL MEETING
OF STOCKHOLDERS TO BE HELD [•], 2017**

This Joint Proxy Statement/Prospectus and Jaguar's Annual Report on Form 10-K for the year ended December 31, 2016 are available at the following website address: www.jaguaranimalhealth.com. You are encouraged to access and review all of the important information contained in the proxy materials before voting. The Jaguar Annual Report is not to be regarded as proxy soliciting material or as a communication through which any solicitation of proxies is made.

By Order of the Board of Directors,

/s/ JAMES J. BOCHNOWSKI

James J. Bochnowski
Chairman of the Board

San Francisco, CA
[•], 2017

PLEASE VOTE YOUR SHARES PROMPTLY. YOU CAN FIND INSTRUCTIONS FOR VOTING ON THE ENCLOSED PROXY CARD. IF YOU HAVE QUESTIONS ABOUT THE PROPOSALS OR ABOUT VOTING YOUR SHARES, PLEASE CALL JAGUAR'S PROXY SOLICITOR, [•], AT [•].

Table of Contents

Napo Pharmaceuticals, Inc.

201 Mission Street
Suite 2375
San Francisco, CA 94105

**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS
TO BE HELD ON [•], 2017**

To the Stockholders of Napo Pharmaceuticals, Inc.:

A special meeting of stockholders of Napo Pharmaceuticals, Inc. will be held at 201 Mission Street, Suite 2375, San Francisco, CA 94105, on [•], 2017 at [•] a.m., local time, for the following purposes:

1. To adopt the Agreement and Plan of Merger, dated as of March 31, 2017, by and among Jaguar Animal Health, Inc., Napo Acquisition Corporation, Napo Pharmaceuticals, Inc. and a representative of Napo Pharmaceuticals, Inc., (sometimes referred to as the merger agreement) and thereby approve the merger. A copy of the merger agreement has been included as *Annex A* to this joint proxy statement/prospectus.
2. To adjourn the special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to adopt the merger agreement and approve the merger.
3. To transact such other business as may properly come before the special meeting or any adjournment or postponement thereof.

If you held shares of Napo common stock at the close of business on [•], 2017, you are entitled to notice of and to vote at the special meeting and any adjournments or postponements thereof. If a new record date is set, you will be entitled to vote at the special meeting if you held shares in Napo as of such record date.

The Napo Board has unanimously approved the merger agreement, has determined that the merger agreement and the transactions contemplated thereby, including the merger, are advisable and in the best interests of Napo and its stockholders, and unanimously recommends that Napo stockholders vote "FOR" the Napo merger proposal and "FOR" the Napo adjournment proposal.

Your vote is very important. The conditions to the merger include that the Napo stockholders approve the adoption of the merger agreement. If you do not return your signed proxy card(s) by mail or vote in person at your special meeting, it will be more difficult for Napo to obtain the necessary quorum to hold its special meeting.

Whether or not you plan to attend the special meeting in person, please complete, sign, date and return the enclosed proxy in the accompanying self-addressed postage pre-paid envelope (or, if your shares are held in "street name" by a broker, nominee, fiduciary or other custodian, follow the directions given by the broker, nominee, fiduciary or other custodian regarding how to instruct it to vote your shares) as soon as possible. If you attend the special meeting, you may withdraw your proxy and vote in person.

By Order of the Board of Directors,

/s/ LISA A. CONTE

Lisa A. Conte
Interim Chief Executive Officer

San Francisco, CA
[•], 2017

PLEASE VOTE YOUR SHARES PROMPTLY. YOU CAN FIND INSTRUCTIONS FOR VOTING ON THE ENCLOSED PROXY CARD. IF YOU HAVE QUESTIONS ABOUT THE PROPOSALS OR ABOUT VOTING YOUR SHARES, PLEASE CALL [•] AT [•] OR VIA EMAIL AT [•].

Table of Contents

ADDITIONAL INFORMATION

Jaguar files annual, quarterly and current reports with the SEC that include important business and financial information about Jaguar. This information is available for you to review at the public reference room of the Securities and Exchange Commission, or SEC, located at 100 F Street, N.E., Washington, D.C. 20549, and through the SEC's website at www.sec.gov. You can also obtain these documents or copies of this joint proxy statement/prospectus free of charge on the investor relations page of Jaguar's website at www.jaguaranimalhealth.com or by requesting it in writing or by telephone from Jaguar at the following address or telephone number:

201 Mission Street, Suite 2375
San Francisco, CA 94105
(415) 371-8300
Attn.: Investor Relations
Website: www.jaguaranimalhealth.com

To obtain timely delivery, you must request the information no later than five business days before [•], 2017. If you would like to request any documents, please do so by [•], 2017 in order to receive them before Jaguar's special meeting. See "Where You Can Find More Information."

You should rely only on the information contained in this document. No one has been authorized to provide you with information that is different from that contained in this document. This document is dated [•], 2017, and you should assume that the information in this document is accurate only as of such date. Neither the mailing of this document to Napo stockholders nor the issuance by Jaguar of shares of Jaguar common stock and/or non-voting common stock in connection with the merger will create any implication to the contrary.

**IMPORTANT NOTICE REGARDING THE INTERNET AVAILABILITY
OF PROXY MATERIALS FOR THE JAGUAR 2017 SPECIAL MEETING
OF STOCKHOLDERS TO BE HELD [•], 2017**

This Joint Proxy Statement/Prospectus and Jaguar's Annual Report on Form 10-K for the year ended December 31, 2016 are available at the following website address: [•]. You are encouraged to access and review all of the important information contained in the proxy materials before voting. The Jaguar Annual Report is not to be regarded as proxy soliciting material or as a communication through which any solicitation of proxies is made.

This document does not constitute an offer to sell, or a solicitation of an offer to buy, any securities, or the solicitation of a proxy, in any jurisdiction to or from any person to whom it is unlawful to make any such offer or solicitation in such jurisdiction. Except where the context otherwise indicates, information contained in this document regarding Napo has been provided by Napo and information contained in this document regarding Jaguar has been provided by Jaguar.

Table of Contents

TABLE OF CONTENTS

<u>QUESTIONS AND ANSWERS ABOUT THIS JOINT PROXY STATEMENT/PROSPECTUS</u>	<u>1</u>
<u>QUESTIONS AND ANSWERS ABOUT THE MERGER</u>	<u>9</u>
<u>SUMMARY THE MERGER</u>	<u>16</u>
<u>The Companies Involved in the Merger</u>	<u>16</u>
<u>The Proposed Merger</u>	<u>17</u>
<u>Merger Consideration</u>	<u>18</u>
<u>Treatment of Stock Options and Warrants</u>	<u>19</u>
<u>Directors and Executive Management of Jaguar Following the Merger</u>	<u>19</u>
<u>Recommendation of the Jaguar Board</u>	<u>19</u>
<u>Recommendation of the Napo Board</u>	<u>20</u>
<u>Opinion of Jaguar Financial Advisor</u>	<u>20</u>
<u>Interests of Certain Jaguar and Napo Directors and Executive Officers in the Merger</u>	<u>21</u>
<u>Material United States Federal Income Tax Consequences of the Merger</u>	<u>21</u>
<u>Accounting Treatment of the Merger</u>	<u>22</u>
<u>Regulatory Matters</u>	<u>22</u>
<u>Conditions to Completion of the Merger</u>	<u>22</u>
<u>No Solicitation of Other Offers</u>	<u>22</u>
<u>Termination</u>	<u>22</u>
<u>Termination Fees and Expenses</u>	<u>23</u>
<u>Shares Beneficially Owned by Directors and Executive Officers of Jaguar and Napo</u>	<u>23</u>
<u>Appraisal Rights</u>	<u>23</u>
<u>Comparison of the Rights of Jaguar and Napo Stockholders</u>	<u>23</u>
<u>RISK FACTORS</u>	<u>24</u>
<u>Risks Related to the Merger</u>	<u>24</u>
<u>Risks Related to Jaguar's Business</u>	<u>29</u>
<u>Risks Related to Jaguar's Intellectual Property</u>	<u>45</u>
<u>Risks Related to Government Regulation of Jaguar's Business</u>	<u>53</u>
<u>Risks Related to Ownership of Jaguar's Common Stock</u>	<u>56</u>
<u>Risks Related to Napo's Business</u>	<u>64</u>
<u>Risks Related to Napo's Intellectual Property</u>	<u>73</u>
<u>Risks Related to Government Regulation of Napo's Business</u>	<u>79</u>
<u>Risks Related to the Combined Company if the Merger is Completed</u>	<u>81</u>
<u>CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>85</u>
<u>JAGUAR BUSINESS</u>	<u>86</u>
<u>NAPO BUSINESS</u>	<u>118</u>
<u>JAGUAR MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</u>	<u>132</u>
<u>NAPO MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</u>	<u>157</u>
<u>MANAGEMENT OF THE COMBINED COMPANY AFTER THE MERGER</u>	<u>173</u>
<u>INFORMATION ABOUT THE JAGUAR SPECIAL MEETING AND VOTE</u>	<u>186</u>
<u>Date, Time and Place of the Special meeting</u>	<u>186</u>
<u>Purpose of the Jaguar Special meeting</u>	<u>186</u>
<u>Record Date and Voting Power</u>	<u>188</u>
<u>Quorum and Voting Rights</u>	<u>188</u>
<u>Required Vote</u>	<u>188</u>
<u>Broker Non-Votes</u>	<u>189</u>
<u>Abstentions: Non-Voting</u>	<u>190</u>
<u>Appraisal Rights: Trading of Shares</u>	<u>190</u>

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

<u>Shares Beneficially Owned by Jaguar Directors and Executive Officers</u>	190
<u>Voting of Shares; Proxies</u>	191
<u>Revocability of Proxies and Changes to a Jaguar Stockholder's Vote</u>	192
<u>Solicitation of Proxies</u>	192
<u>Other Business; Adjournments</u>	192
<u>Attending the Meeting</u>	192
<u>Jaguar Proposal 1</u>	193
<u>Jaguar Proposal 2</u>	193
<u>Jaguar Proposal 3</u>	194
<u>Jaguar Proposal 4</u>	195
<u>Jaguar Proposal 5</u>	199
<u>Jaguar Proposal 6</u>	200
<u>SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE OF JAGUAR</u>	201
<u>EQUITY COMPENSATION PLAN INFORMATION OF JAGUAR</u>	201
<u>COMPENSATION OF DIRECTORS AND EXECUTIVE OFFICERS OF JAGUAR</u>	202
<u>Summary Compensation Table</u>	202
<u>Executive Employment Agreements</u>	206
<u>Compensation of Directors</u>	208
<u>CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS OF JAGUAR</u>	211
<u>INFORMATION ABOUT THE NAPO SPECIAL MEETING AND VOTE</u>	218
<u>Date, Time and Place of the Special Meeting</u>	218
<u>Purpose of the Napo Special Meeting</u>	218
<u>Record Date and Voting Power</u>	218
<u>Quorum and Voting Rights</u>	218
<u>Required Vote</u>	218
<u>Broker Non-Votes</u>	219
<u>Abstentions; Non-Voting</u>	219
<u>Appraisal Rights</u>	219
<u>Shares Beneficially Owned by Napo Directors and Executive Officers</u>	220
<u>Voting of Shares; Proxies</u>	220
<u>Revocability of Proxies and Changes to a Napo Stockholder's Vote</u>	220
<u>Solicitation of Proxies</u>	221
<u>Other Business; Adjournments</u>	221
<u>Attending the Meeting</u>	221
<u>NAPO PROPOSAL 1</u>	221
<u>NAPO PROPOSAL 2</u>	222
<u>THE PROPOSED MERGER</u>	224
<u>General</u>	224
<u>Jaguar Merger Proposal</u>	224
<u>Napo Merger Proposal</u>	224
<u>Merger Consideration</u>	224
<u>Background of the Merger</u>	226
<u>Recommendation of the Jaguar Board and its Reasons for the Merger</u>	230
<u>Recommendation of the Napo Board and its Reasons for the Merger</u>	232
<u>Opinion of Jaguar Financial Advisor</u>	234
<u>Accounting Treatment</u>	246
<u>Material United States Federal Income Tax Consequences of the Merger</u>	246
<u>Appraisal Rights</u>	249
<u>Regulatory Matters Relating to the Merger</u>	249
<u>Stock Exchange Listing; Shares to be Issued in the Merger</u>	250

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

<u>ADDITIONAL INTERESTS OF CERTAIN OF JAGUAR AND NAPO'S DIRECTORS AND EXECUTIVE OFFICERS IN THE MERGER</u>	<u>252</u>	
<u>Interests of the Jaguar Directors and Executive Officers in the Merger</u>	<u>252</u>	
<u>Interests of the Napo Directors and Executive Officers in the Merger</u>	<u>252</u>	
<u>THE MERGER AGREEMENT AND RELATED AGREEMENTS</u>	<u>256</u>	
<u>Structure</u>	<u>256</u>	
<u>Completion and Effectiveness of the Merger</u>	<u>256</u>	
<u>Merger Consideration</u>	<u>256</u>	
<u>Treatment of Napo RSUs</u>	<u>258</u>	
<u>Treatment of Napo Options and Warrants</u>	<u>259</u>	
<u>Fractional Shares</u>	<u>259</u>	
<u>Conversion of Shares; Exchange of Certificates</u>	<u>259</u>	
<u>Appraisal Rights</u>	<u>260</u>	
<u>Reasonable Best Efforts; Other Agreements</u>	<u>261</u>	
<u>Representations and Warranties</u>	<u>261</u>	
<u>Conduct of Business Before Completion of the Merger</u>	<u>262</u>	
<u>Non-Solicitation</u>	<u>265</u>	
<u>Conditions to Completion of the Merger</u>	<u>265</u>	
<u>Termination</u>	<u>266</u>	
<u>Termination Fee and Expenses</u>	<u>266</u>	
<u>Effect of Termination</u>	<u>267</u>	
<u>Amendment, Waiver and Extension of the Merger Agreement</u>	<u>267</u>	
<u>Settlement Agreements and Investor Rights Agreement</u>	<u>267</u>	
<u>UNAUDITED PRO FORMA COMBINED CONDENSED FINANCIAL STATEMENTS</u>	<u>269</u>	
<u>UNAUDITED PRO FORMA COMBINED CONDENSED BALANCE SHEETS OF JAGUAR AND NAPO</u>	<u>271</u>	
<u>UNAUDITED PRO FORMA COMBINED CONDENSED STATEMENTS OF OPERATIONS OF JAGUAR AND NAPO</u>	<u>273</u>	
<u>DESCRIPTION OF JAGUAR CAPITAL STOCK</u>	<u>277</u>	
<u>General</u>	<u>277</u>	
<u>Common Stock</u>	<u>277</u>	
<u>Preferred Stock</u>	<u>278</u>	
<u>Warrants</u>	<u>278</u>	
<u>Registration Rights</u>	<u>278</u>	
<u>Anti-Takeover Effects of Delaware Law and Jaguar's Certificate of Incorporation and Bylaws</u>	<u>279</u>	
<u>COMPARISON OF RIGHTS OF JAGUAR AND NAPO STOCKHOLDERS</u>	<u>282</u>	
<u>APPRAISAL RIGHTS</u>	<u>288</u>	
<u>TRADEMARK NOTICE</u>	<u>292</u>	
<u>LEGAL MATTERS</u>	<u>292</u>	
<u>EXPERTS</u>	<u>292</u>	
<u>STOCKHOLDER PROPOSALS</u>	<u>292</u>	
<u>Jaguar</u>	<u>292</u>	
<u>Napo</u>	<u>292</u>	
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>293</u>	
<u>INDEX TO FINANCIAL STATEMENTS</u>	<u>F-1</u>	
<u>Annex A</u>	<u>Agreement and Plan of Merger, dated as of March 31, 2017, by and among Jaguar Animal Health, Inc., Napo Acquisition Corporation, Napo Pharmaceuticals, Inc. and Gregory Stock</u>	<u>A-1</u>
<u>Annex B</u>	<u>Form of Third Amended and Restated Certificate of Incorporation of Jaguar Animal Health, Inc.</u>	<u>B-1</u>

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

<u>Annex C</u>	<u>Opinion of Jaguar Financial Advisor</u>	<u>C-1</u>
<u>Annex D</u>	<u>Section 262 of the General Corporation Law of the State of Delaware</u>	<u>D-1</u>
<u>Annex E</u>	<u>Illustrative Examples Calculating the Shares of Jaguar Common Stock Issuable to Holders of Contingent Rights</u>	<u>E-1</u>
<u>Annex F</u>	<u>Summary Table of Hurdle Amounts</u>	<u>F-1</u>

Table of Contents

QUESTIONS AND ANSWERS ABOUT THIS JOINT PROXY STATEMENT/PROSPECTUS

The following are some questions that you, as a stockholder of Jaguar and/or Napo, may have regarding this joint proxy statement/prospectus, the Jaguar special meeting of stockholders and the Napo special meeting of stockholders, together with brief answers to those questions. Jaguar and Napo urge you carefully read this joint proxy statement/prospectus in its entirety, including the annexes and other documents attached and/or referred to in this joint proxy statement/prospectus, because the information in this section does not provide all of the information that will be important to you with respect to the Jaguar special meeting of stockholders and/or the Napo special meeting of stockholders.

Q: Why am I receiving this document?

A: You are receiving this document because you have been identified as a stockholder of Jaguar Animal Health, Inc. (sometimes referred to as Jaguar) or Napo Pharmaceuticals, Inc. (sometimes referred to as Napo) as of the applicable record date, and you are entitled, as applicable, to vote at Jaguar's special meeting of stockholders or Napo's special meeting of stockholders to approve the matters set forth below.

In connection with the proposed acquisition of Napo by Jaguar through a merger, holders of Jaguar common stock are being asked to approve at the special meeting: (i) the issuance of shares of Jaguar common stock and non-voting common stock in connection with the transactions contemplated by the Agreement and Plan of Merger, dated as of March 31, 2017 (sometimes referred to as the merger agreement), by and among Jaguar, Napo Acquisition Corporation (sometimes referred to as Merger Sub), Napo, and a Napo representative, (ii) the issuance of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019, issued or issuable by Napo to certain investors in the original principal amount of up to \$12,500,000, as amended on March 31, 2017, (iii) the issuance of \$3,000,000 of Jaguar common stock at a price equal to \$0.925 per share to Invesco Asset Management Limited, or Invesco, pursuant to the Commitment Letter, dated February 21, 2017, between Jaguar and Invesco (sometimes referred to herein as the Invesco Commitment Letter), (iv) the amendment of the Jaguar 2014 Stock Incentive Plan (sometimes referred to herein as the 2014 Plan) to increase the number of shares of Jaguar common stock authorized for issuance under the 2014 Plan by 6,500,188 shares, (v) the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 50 million shares to 225 million shares, authorize a class of non-voting common stock, require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and change the Jaguar corporate name to "Jaguar Health, Inc.", and (vi) a proposal to adjourn Jaguar's special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to approve the above matters.

Napo stockholders are being asked to adopt at a special meeting (i) the merger agreement, and thereby approve the merger, and (ii) a proposal to adjourn the special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to adopt the merger agreement and approve the merger.

This document is serving as both a joint proxy statement of Jaguar and Napo and a prospectus of Jaguar. It is a joint proxy statement because it is being used by each of the Jaguar Board and Napo Board to solicit proxies from their respective stockholders with respect to the meetings. It is a prospectus because Jaguar is offering contingent rights to receive shares of its common stock in exchange for shares of Napo common stock if the merger is completed and such contingent rights may entitle the holders thereof to receive shares of Jaguar common stock if certain conditions are

Table of Contents

satisfied. A copy of the merger agreement is attached as *Annex A* to this joint proxy statement/prospectus.

Q:
Who is entitled to vote at Jaguar's special meeting?

A:
All holders of Jaguar common stock, who held shares at the record date for the Jaguar special meeting (the close of business on [•], 2017) are entitled to receive notice of, and to vote at, the Jaguar special meeting provided that those shares remain outstanding on the date of the Jaguar special meeting. As of the close of business on [•], 2017, there were [•] shares of Jaguar common stock issued and outstanding. Each holder of Jaguar outstanding common stock is entitled to one vote for each share of Jaguar common stock owned at the record date.

Q:
Who is entitled to vote at the Napo special meeting?

A:
All holders of Napo common stock who held shares at the record date for the Napo special meeting (the close of business on [•], 2017) are entitled to receive notice of, and to vote at, the Napo special meeting provided that those shares remain outstanding on the date of the Napo special meeting. As of the close of business on [•], 2017, there were [•] shares of Napo common stock issued and outstanding. Each holder of Napo common stock is entitled to one vote for each share of Napo common stock owned at the record date.

Q:
What constitutes a quorum for the Jaguar special meeting?

A:
A quorum is the number of shares that must be represented at a meeting to lawfully conduct business. The presence at the special meeting, in person, or by remote communication, if applicable, or by proxy, of the holders of a majority of the shares of Jaguar common stock issued and outstanding and entitled to vote at the special meeting constitutes a quorum for the transaction of business. Abstentions and broker non-votes, if any, will be included in the calculation of the number of shares considered to be present at the Jaguar special meeting for purposes of determining a quorum.

Q:
What constitutes a quorum for the Napo special meeting?

A:
A quorum is the number of shares that must be represented at a meeting to lawfully conduct business. The presence at the special meeting, in person or by proxy, of the holders of a majority of the shares of Napo common stock issued and outstanding and entitled to vote at the special meeting constitutes a quorum for the transaction of business. Abstentions and broker non-votes, if any, will be included in the calculation of the number of shares considered to be present at the meeting for quorum purposes.

Q:
How will my proxy be voted?

A:
If you are a Jaguar stockholder and you submit your proxy by telephone, by the Internet or by completing, signing, dating and returning your signed proxy card(s), your proxy will be voted in accordance with your instructions. If you are a Napo stockholder and you complete, sign, date and return your signed proxy card(s), your proxy will be voted in accordance with your instructions. If other matters are properly brought before the stockholders meetings, or any adjournments of the meetings, your proxy includes discretionary authority on the part of the individuals appointed to vote your shares to act on those matters according to their best judgment.

Q:
May I vote in person?

A:
Yes. If you hold shares directly in your name as a stockholder of record of Jaguar stock as of the close of business on [•], 2017, or of Napo common stock as of the close of business on [

Table of Contents

-] 2017, you may attend your annual or special meeting, as applicable, and vote your shares in person, instead of submitting your proxy by telephone, by the Internet or returning your signed proxy card(s) by mail, as applicable. If you hold shares of Jaguar common stock or Napo common stock in "street name," meaning through a broker, nominee, fiduciary or other custodian, you must obtain a legal proxy from that institution and present it to the inspector of election with your ballot to be able to vote in person at the Jaguar special meeting or Napo special meeting, as applicable. To request a legal proxy, please contact your broker, nominee, fiduciary or other custodian. Jaguar and Napo highly recommend that you vote in advance by submitting your proxy by telephone, by the Internet or by mail, as applicable, even if you plan to attend the stockholders meeting of your company.

Q: What are the voting requirements to approve each of the proposals that will be voted on at the Jaguar special meeting?

A:

Proposal	Vote Required
1. Approval of the issuance of shares of Jaguar common stock and non-voting common stock in connection with the transactions contemplated by the merger agreement	If a quorum is present, a majority of the shares of Jaguar common stock represented at the special meeting, voting together as a single class, and entitled to vote.
2. Approval of the issuance of shares of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019, issued or issuable by Napo to certain investors in the original principal amount of up to \$12,500,000, as amended on March 31, 2017	If a quorum is present, a majority of the shares of Jaguar common stock represented at the special meeting, voting together as a single class, and entitled to vote.
3. Approval of the issuance of shares of \$3,000,000 in shares of Jaguar common stock at a price equal to \$0.925 per share to Invesco Asset Management Limited pursuant to the Invesco Commitment Letter	If a quorum is present, a majority of the shares of Jaguar common stock represented at the special meeting, voting together as a single class, and entitled to vote.
4. Approval of the amendment of the 2014 Plan to increase the number of shares of Jaguar common stock authorized for issuance under the 2014 Plan by 6,500,188 shares	Affirmative vote of a majority of the outstanding shares of Jaguar common stock represented at the special meeting, voting together as a single class, and entitled to vote.

Table of Contents

- | | |
|---|--|
| <p>5. Adoption of Jaguar's Third Amended and Restated Certificate of Incorporation to (i) increase the number of authorized shares of common stock from 50 million shares to 225 million shares, (ii) authorize a class of non-voting common stock, (iii) require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and (iv) change the Jaguar corporate name to "Jaguar Health, Inc."</p> | <p>Affirmative vote of a majority of the outstanding shares of Jaguar common stock represented at the special meeting, voting together as a single class, and entitled to vote.</p> |
| <p>6. Approval of the adjournment of the Jaguar special meeting, if necessary, to solicit additional proxies if there are not sufficient votes to approve the first seven proposals</p> | <p>Affirmative vote of a majority of the outstanding shares of Jaguar common stock, represented at the meeting, voting together as a single class, and entitled to vote if a quorum is present or a majority of the voting stock represented in person, by remote communication, or by proxy if a quorum is not present.</p> |

Q: What are the voting requirements to approve each of the proposals that will be voted on at the Napo special meeting?

A:

Proposal	Vote Required
<p>1. Adoption of the merger agreement, and approval of the merger</p>	<p>Affirmative vote of a majority of the outstanding shares of Napo common stock, voting together as a single class, and entitled to vote</p>
<p>2. Approval of adjournment of the Napo special meeting, if necessary, to solicit additional proxies if there are not sufficient votes to approve the first proposal</p>	<p>Affirmative vote of a majority of the shares of Napo common stock, represented at the special meeting, voting together as a single class, and entitled to vote if a quorum is present or a majority of the voting stock represented in person or by proxy if a quorum is not present</p>

Q: Does Jaguar's board of directors recommend that Jaguar stockholders approve the proposals regarding the merger including the issuance of shares of Jaguar common stock and non-voting common stock, the amendment of the 2014 Plan, and the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation?

A:

Yes. The board of directors of Jaguar (sometimes referred to as the Jaguar Board) has unanimously approved the merger agreement and the transactions contemplated thereby and determined that the issuance of shares of Jaguar common stock and non-voting common stock, the amendment of the 2014 Plan, and the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation as contemplated by the merger agreement is in the best interests of Jaguar. Therefore, the Jaguar Board unanimously recommends that you vote **"FOR"** the proposal

Table of Contents

respecting the issuance of shares of Jaguar common stock and non-voting common stock as contemplated by the merger agreement, "FOR" the proposal respecting the issuance of shares of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019, "FOR" the proposal respecting the issuance of shares of Jaguar common stock to Invesco pursuant to the Invesco Commitment Letter, "FOR" the proposal to amend the 2014 Plan, and "FOR" the proposal respecting the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation at the annual Jaguar stockholders' meeting. See "The Proposed Merger Recommendation of the Jaguar Board and its Reasons for the Merger" beginning on page 230 of this joint proxy statement/prospectus.

Q:
Does Napo's board of directors recommend that Napo stockholders adopt the merger agreement and the transactions contemplated thereby?

A:
Yes. The board of directors of Napo (sometimes referred to as the Napo Board) has unanimously approved the merger agreement and the transactions contemplated thereby, including the merger, and determined that these transactions are advisable and in the best interests of Napo and its stockholders. Therefore, the Napo Board unanimously recommends that you vote "FOR" the proposal to adopt the merger agreement and the transactions contemplated thereby at the Napo special meeting. See "The Proposed Merger Recommendation of the Napo Board and its Reasons for the Merger" beginning on page 232 of this joint proxy statement/prospectus. In considering the recommendation of the board of directors of Napo with respect to the merger agreement and the transactions contemplated thereby, including the merger, you should be aware that certain directors and executive officers of Napo are parties to agreements or are participants in other arrangements that give them interests that may be different from, or in addition to, your interests as a stockholder of Napo. It should be noted that certain members of the Napo Board have equity interests in Napo capital stock and that in connection with the merger, the Napo Board will receive indemnification for acts or omissions occurring prior to the effective time of the merger. You should consider these interests in voting on this proposal. These different interests are described under "Additional Interests of Certain of Jaguar and Napo's Directors and Executive Officers in the Merger Interests of the Napo Directors and Executive Officers in the Merger" beginning on page 252 of this joint proxy statement/prospectus.

Q:
What if my shares are held in "street name"?

A:
If some or all of your shares of Jaguar and/or Napo are held in "street name" by your broker, nominee, fiduciary or other custodian, you must provide your broker, nominee, fiduciary or other custodian with instructions on how to vote your shares; otherwise, your broker, nominee, fiduciary or other custodian will not be able to vote your shares on some of the proposals before your company's stockholders meeting.

As a result of the foregoing, please be sure to provide your broker, nominee, fiduciary or other custodian with instructions on how to vote your shares. Please check the voting form used by your broker, nominee, fiduciary or other custodian to see if it offers telephone or Internet submission of proxies.

Q:
What are abstentions and broker non-votes?

An "abstention" is the voluntary act of not voting by a stockholder who is present at a meeting in person or by proxy and entitled to vote. "Broker non-votes" refers to shares held by a brokerage firm or other nominee (for the benefit of its client) that are represented at the meeting, but with respect to which such broker or nominee is not instructed to vote on a particular proposal and does not have discretionary authority to vote on that proposal.

Table of Contents

If you are a beneficial owner whose shares are held in street name and you do not submit voting instructions to your broker, your broker may generally vote your shares in its discretion on routine matters. However, pursuant to rules of The NASDAQ Stock Market (sometimes referred to as NASDAQ), brokers do not have the discretion to vote their clients' shares on non-routine matters, unless the broker receives voting instructions from the beneficial owner. All the Jaguar Proposals and Napo Proposals are considered non-routine matters. Consequently, if your shares are held in street name, you must provide your broker with instructions on how to vote your shares in order for your shares to be voted on each of Jaguar's Proposals or each Napo's Proposals, as applicable.

Brokers may not vote your shares on non-routine matters in the absence of your specific instructions as to how to vote, thus we strongly encourage you to provide instructions to your broker regarding the voting of your shares you hold in "street name" or through a broker or other nominee.

Q: If I am a record holder of my shares, what happens if I abstain from voting (whether by returning my proxy card or submitting my proxy by telephone or via the Internet) or I don't submit a proxy?

A:
Jaguar.

For the proposal to approve the issuance of shares of Jaguar common stock and non-voting common stock as contemplated by the merger agreement, an abstention or a failure to submit a proxy will not have an effect on the outcome of the vote for the proposal, but it will make it more difficult to meet the requirement under Jaguar's bylaws that the holders of a majority of the Jaguar common stock issued and outstanding and entitled to vote at the special meeting be present in person or by remote communication, if applicable, or represented by proxy to constitute a quorum at the special meeting.

For the proposal to approve the issuance of shares of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019, an abstention or a failure to submit a proxy will not have an effect on the outcome of the vote for the proposal.

For the proposal to approve the issuance of \$3,000,000 of Jaguar common stock at a price equal to \$0.925 per share to Invesco pursuant to the Invesco Commitment Letter, an abstention or a failure to submit a proxy will not have an effect on the outcome of the vote for the proposal.

For the proposal to amend the 2014 Plan, an abstention or failure to submit a proxy will have the same effect as a vote "AGAINST" such proposal.

For the proposal to approve the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation as contemplated by the merger agreement, an abstention or failure to submit a proxy will have the same effect as a vote "AGAINST" such proposal.

For the proposal to adjourn the Jaguar special meeting, if necessary or advisable, an abstention will have the same effect as a vote cast "AGAINST" such proposal. A failure to submit a proxy will not have an effect on the outcome of the vote for the proposal.

Napo.

For the proposal to adopt the merger agreement, an abstention or a failure to submit a proxy will have the same effect as a vote "AGAINST" such proposal.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

For the proposal to adjourn the Napo special meeting, if necessary or advisable, an abstention will have the same effect as a vote cast "**AGAINST**" such proposal. A failure to submit a proxy will not have an effect on the outcome of the vote for the proposal.

Table of Contents

Q: What will happen if I return my proxy card without indicating how to vote?

A: If you are a Jaguar stockholder of record and submit your proxy but do not make specific choices, your proxy will follow the Jaguar Board's recommendations and your shares will be voted "**FOR**" each of Jaguar's proposals.

If you are a Napo stockholder of record and submit your proxy but do not make specific choices with respect to the proposals, your proxy will follow Napo Board's recommendations and your shares will be voted "**FOR**" the proposal to adopt the merger agreement (under such circumstances, your proxy will constitute a waiver of your right of appraisal under Section 262 of the of the General Corporation Law of the State of Delaware (sometimes referred to as Section 262) and will nullify any previously delivered written demand for appraisal under Section 262), and "**FOR**" the proposal to adjourn the special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to adopt the merger agreement and approve the merger.

Q: What happens if I sell my shares after the record date but before the stockholders meeting?

A: The record date for the Jaguar special meeting (the close of business on [•], 2017) is earlier than the date of the Jaguar special meeting and earlier than the date that the merger is expected to be completed. If you sell or otherwise transfer shares of Jaguar stock after the record date but before the date of the Jaguar special meeting, you will retain your right to vote those shares at the Jaguar special meeting.

The record date for the Napo special meeting (the close of business on [•], 2017) is earlier than the date of the Napo special meeting and earlier than the date that the merger is expected to be completed. If you sell or otherwise transfer shares of Napo common stock after the record date but before the date of the Napo special meeting, you will retain your right to vote those shares at the Napo special meeting. However, you will not have the right to receive the merger consideration in respect of those shares. In order to receive the merger consideration, you must hold your shares through completion of the merger.

Q: What does it mean if I receive more than one set of materials?

A: This means you may own shares of both Jaguar and Napo, or you may own shares of Jaguar or Napo that are registered under different names or held in different brokerage accounts. For example, you may own some shares directly as a stockholder of record and other shares through a broker or you may own shares through more than one broker. In these situations, you may receive multiple sets of proxy materials. It is necessary for you to vote, sign and return all of the proxy cards or follow the instructions for any alternative voting procedure on each of the proxy cards you receive in order to vote all of the shares you own. Each proxy card you receive will come with its own prepaid return envelope; if you submit your proxy by mail; make sure you return each proxy card in the return envelope which accompanied that proxy card.

Q: Can I revoke my proxy and change my vote?

A: Yes. You have the right to revoke your proxy at any time prior to the time your shares are voted at your stockholders meeting. If you are a stockholder of record, your proxy can be revoked in several ways:

by notifying your company's Corporate Secretary prior to the stockholders meeting that you are revoking your proxy;

by executing and delivering a later dated proxy card or, for Jaguar stockholders only, by submitting a later dated vote by telephone or by the Internet; or

Table of Contents

by attending your stockholders meeting and voting your shares in person. However, if your shares are held in "street name" through a broker, nominee, fiduciary or other custodian, you must check with your broker, nominee, fiduciary or other custodian to determine how to revoke your proxy.

Q:
When and where are the stockholders meetings?

A:
The Jaguar special meeting will take place on [•], 2017, at [•] a.m., local time, at 201 Mission Street, Suite 2375, San Francisco, CA 94105. The Napo special meeting will take place on [•], 2017, at [•] a.m., local time, at 201 Mission Street, Suite 2375, San Francisco, CA 94105.

Q:
Who can attend the stockholders meetings? What must I bring to attend the stockholders meetings?

A:
Admittance to the Jaguar special meeting will require a valid photo identification, such as a driver's license or passport. Attendance at the meeting will be limited to stockholders of record as of the record date and one guest per stockholder. Stockholders whose shares are held in "street name" by a broker, nominee, fiduciary or other custodian should bring with them a copy of a brokerage statement reflecting stock ownership as of the record date, together with a valid photo identification. If you want to vote your shares of Jaguar common stock held in "street name" in person at the Jaguar special meeting, you will have to obtain a legal proxy in your name from the broker, nominee, fiduciary or other custodian who holds your shares.

Admittance to the Napo special meeting will require a valid photo identification, such as a driver's license or passport. Attendance at the meeting will be limited to stockholders of record as of the record date. Stockholders whose shares are held in "street name" by a broker, nominee, fiduciary or other custodian should bring with them a copy of a brokerage statement reflecting stock ownership as of the record date, together with a valid photo identification. If you want to vote your shares of Napo common stock held in "street name" in person at the Napo special meeting, you will have to obtain a legal proxy in your name from the broker, nominee, fiduciary or other custodian who holds your shares.

Q:
Who can answer any questions I may have about the stockholders meetings?

A:
Jaguar stockholders may call [•], Jaguar's proxy solicitors for the special meeting, toll-free at [•]. Napo stockholders may call [•] at [•] or email [•].

Table of Contents

QUESTIONS AND ANSWERS ABOUT THE MERGER

The following are some questions that you, as a stockholder of Jaguar and/or Napo, may have regarding the merger, together with brief answers to those questions. Jaguar and Napo urge you carefully read this joint proxy statement/prospectus in its entirety, including the annexes and other documents attached and/or referred to in this joint proxy statement/prospectus, because the information in this section does not provide all of the information that will be important to you with respect to the merger.

Q: What will happen in the merger?

A: In the merger, Merger Sub will merge with and into Napo. Napo will be the surviving entity in the merger as a wholly-owned subsidiary of Jaguar. Thus, Jaguar will acquire Napo through the merger.

Q: What will Napo stockholders receive in the merger for their shares?

A: At the effective time of the merger, (i) each issued and outstanding share of Napo common stock (other than dissenting shares and shares held by Jaguar or Napo) will be converted into a contingent right to receive (x) up to a whole number of shares of Jaguar common stock comprising in the aggregate up to approximately 21.5% of the fully diluted shares of Jaguar common stock (sometimes referred to herein as the Merger Shares) immediately following the consummation of the merger, which contingent right will vest only if the resale of certain shares of Jaguar common stock issued by Jaguar to Nantucket in the Napo debt settlement (sometimes referred to herein as the Tranche A Shares) provides Nantucket with specified cash returns over a specified period of time (sometimes referred to herein as the Hurdle Amounts), and (y) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, additional shares of the Jaguar common stock (equal to 50% of the unsold Tranche A shares), which will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units, (ii) existing creditors of Napo will be issued in the aggregate approximately 43,156,649 shares of Jaguar non-voting common stock and 2,005,245 shares of Jaguar voting common stock in full satisfaction of all existing indebtedness then owed by Napo to such creditors and (iii) an existing Napo stockholder will be issued an aggregate of approximately 3,243,243 shares of Jaguar common stock in return for \$3 million of new funds invested into Jaguar by such investor, which will be immediately loaned to Napo to partially facilitate the extinguishment of the debt that Napo owes to Nantucket. For a discussion of the specific groups of shares of Jaguar common stock from which the Merger Shares are drawn and the methodology for calculating the number of Merger Shares issuable to the holders of contingent rights, see "The Merger Agreement and Related Agreements Merger Consideration Calculation of Shares of Jaguar Common Stock Issuable to Holders of Contingent Rights" and *Annex E* to this joint proxy statement/prospectus. A summary of the Hurdle Amounts at different time periods is set forth in *Annex F* to this joint proxy statement/prospectus.

Shares of Jaguar non-voting common stock have the same rights to dividends and other distributions and are convertible into shares of Jaguar common stock on a one-for-one basis (x) upon transfers to non-affiliates of Nantucket, (y) upon the release from escrow of certain non-voting shares held by Nantucket to the legacy stockholders of Napo under specified conditions and (z) at any time on or after April 1, 2018 at the option of the respective holders thereof.

Jaguar will also assume (i) each outstanding and unexercised option to purchase Napo common stock, which will be converted into options to purchase Jaguar common stock, (ii) each outstanding warrant to purchase Napo common stock, which will be converted into warrants to purchase Jaguar common stock, and (iii) each outstanding restricted stock unit to acquire Napo common stock, which will be converted into restricted stock units to acquire Jaguar common stock.

Table of Contents

The stockholders of Jaguar will continue to own their existing shares and the rights and privileges of their existing shares will not be affected by the merger. However, because Jaguar will be issuing new shares of Jaguar common stock and non-voting common stock to Napo creditors, and options, warrants and restricted stock units exercisable for Jaguar common stock to holders of Napo options, warrants and restricted stock units in the merger, the stockholders of Jaguar will experience dilution as a result of the issuance of shares in the merger and each outstanding share of Jaguar common stock immediately prior to the merger will represent a smaller percentage of the total number of shares of Jaguar common stock and non-voting common stock issued and outstanding after the merger. It is expected that Jaguar stockholders before the merger will hold approximately 25% of the total Jaguar common stock and non-voting common stock issued and outstanding on a fully diluted basis immediately following completion of the merger. Thus, Jaguar stockholders before the merger will experience dilution in the amount of approximately 75% as a result of the merger.

Q:
Will any fractional shares be issued in connection with the merger?

A:
No fractional shares of Jaguar common stock or non-voting common stock will be issued. Instead, any fractional shares will be rounded down to the next whole number of shares. See "Risk Factors" beginning on page 24 of this joint proxy statement/prospectus.

Q:
When will Napo stockholders know whether their contingent rights to receive Jaguar common stock are exchangeable for shares of Jaguar common stock?

A:
A final determination as to the final number of Merger Shares, if any, that will be issued to holders of all contingent rights pursuant to the merger agreement, will be made no later than the later to occur of (x) the date on which both (a) the first anniversary of the consummation of the merger, which constitutes the expiration date of the representations, covenants and agreements in the merger agreement or in any writing delivered by Napo to Jaguar in connection with the merger agreement (such 12-month period following the consummation of the merger sometimes referred to herein as the Survival Period), has occurred, and (b) there are no outstanding claims for indemnification under Article VI of the merger agreement, and (y) the third anniversary of the date on which the merger is consummated (such later date referenced in clauses (x) and (y) above, sometimes referred to herein as the Final Determination Date).

Within 60 days of the Final Determination Date, solely to the extent holders of contingent rights are entitled to receive any Merger Shares under the terms of the Merger Agreement, Jaguar will mail to each contingent right holder (such date of mailing sometimes referred to as the Contingent Right Holders Notice Date) a letter of transmittal and instructions for use in effecting the surrender of such holder's Napo stock certificates representing the right to such Merger Shares in exchange for the Merger Shares. If you are a contingent right holder, you should carefully review and follow the instructions accompanying the letter of transmittal. The letter of transmittal will be mailed to each Napo stockholder on the record date. You will need to sign, date and complete the letter of transmittal and return it, along with your Napo stock certificates (or customary affidavits and indemnification regarding the loss or destruction of such certificates or the guaranteed delivery of such certificates), to the exchange agent, at the address and pursuant to the instructions given in the materials. The submission deadline is 5:00 p.m. Pacific Time on the one-year anniversary of the Contingent Right Holders Notice Date. If you do not submit a properly completed and signed letter of transmittal and surrender your Napo stock certificates to the exchange agent by the submission deadline, you will look only to Jaguar (subject to abandoned property, escheat and other similar laws) as a general creditor for payment of your claim for Merger Shares (if any) and any dividends or distributions with respect to Merger Shares. Jaguar will not be liable to any holder of Napo stock certificates (or dividends or distributions with respect thereto) or cash

Table of Contents

delivered to a public official pursuant to any applicable abandoned property, escheat or similar law.

Q:
Should I send in my Napo stock certificates now?

A:
No. The exchange agent will provide each Napo stockholder with a transmittal letter and instructions for surrendering each share of Napo common stock to the exchange agent in exchange for the merger consideration. See "The Merger Agreement and Related Agreements Conversion of Shares; Exchange of Certificates" beginning on page 259 of this joint proxy statement/prospectus for more information regarding the procedure for exchanging your Napo stock certificates for the merger consideration. Jaguar stockholders will keep their existing stock certificates.

Q:
What do I need to do now?

A:
After you carefully read this joint proxy statement/prospectus, please respond by completing, signing, dating and returning your signed proxy card(s) in the enclosed prepaid return envelope(s), or, for Jaguar stockholders only, by submitting your proxy by telephone or by the Internet, as soon as possible, so that your shares may be represented at your stockholders meeting. If you hold your shares in "street name" through a broker, nominee, fiduciary or other custodian, follow the directions given by the broker, nominee, fiduciary or other custodian regarding how to instruct them to vote your shares. In order to ensure that your vote is recorded, please submit your proxy as instructed on your proxy card(s) even if you currently plan to attend your stockholders meeting in person.

Q:
Why is my vote important?

A:
If you do not submit your proxy by returning your signed proxy card(s) by mail, voting in person at your stockholders meeting, or, for Jaguar stockholders only, by submitting your proxy by telephone or by the Internet, it will be more difficult for Jaguar and Napo to obtain the necessary quorum to hold their respective annual and special meeting and to obtain the stockholder approvals necessary for the completion of the merger. If a quorum is not present at the Jaguar special meeting or the Napo special meeting, the stockholders of that company will not be able to take action on any of the proposals at that meeting.

While a failure to submit a proxy or vote in person at the stockholders meeting, or a failure to provide your broker, nominee, fiduciary or other custodian, as applicable, with instructions on how to vote your shares will not affect the outcome of the vote on the proposal to approve the issuance of shares of Jaguar common stock and non-voting common stock (Proposals 1-3), a failure to submit a proxy or vote in person at the special meeting will make it more difficult to meet the requirement under Jaguar's bylaws that the holders of a majority of the shares of Jaguar common stock and entitled to vote at the special meeting be present in person or by proxy to constitute a quorum at the special meeting.

For the Jaguar stockholders to approve the amendment of the 2014 Plan (Proposal 4), a majority of the outstanding shares of common stock entitled to vote on such matter must approve such proposal; thus an abstention from voting, a failure to submit a proxy or vote in person at the special meeting, or a failure to provide your broker, nominee, fiduciary or other custodian, as applicable, with instructions on how to vote your shares could have the same effect as a vote "**AGAINST**" the proposal.

For the proposal to adopt Jaguar's Third Amended and Restated Certificate of Incorporation (Proposal 5), a majority of the outstanding shares of common stock entitled to vote on such matter must approve such proposal; thus an abstention from voting, a failure to submit a proxy or vote in person at the special meeting, or a failure to provide your broker, nominee, fiduciary or other

Table of Contents

custodian, as applicable, with instructions on how to vote your shares will have the same effect as a vote "AGAINST" the proposal.

For the Napo stockholders to adopt the merger agreement and approve the merger, a majority of the outstanding shares of common stock entitled to vote on such matter must approve such proposal; thus an abstention from voting, a failure to submit a proxy or vote in person at the special meeting, or a failure to provide your broker, nominee, fiduciary or other custodian, as applicable, with instructions on how to vote your shares could have the same effect as a vote "AGAINST" the proposal.

Your vote is very important. Jaguar and Napo cannot complete the merger unless (i) holders of Jaguar common stock approve the share issuances in connection with the transactions contemplated by the merger agreement, (ii) holders of Jaguar common stock approve the amendment of the 2014 Plan, (iii) holders of Jaguar common stock adopt the Third Amended and Restated Certificate of Incorporation, and (iv) Napo stockholders adopt the merger agreement and approve the merger.

Q: Why have Jaguar and Napo agreed to the merger?

A: The board of directors and management team of each of Jaguar and Napo believe the merger to provide substantial strategic and financial benefits to their stockholders, customers and other stakeholders, including, among others:

expected synergies and economies of scale in manufacturing and commercialization of crofelemer for various human and animal indications;

the centrality of Napo's technology for proprietary gastrointestinal disease products to both Jaguar and Napo;

expected support to the development of crofelemer to address the problem of chemotherapy-induced diarrhea in both humans and companion animals;

expected efficiencies of combining the skillsets of the highly complementary Napo and Jaguar teams;

the strong foundation for collaborations resulting from the combined company's possession of global unencumbered rights to Mytesi and a host of crofelemer-based human products, combined with horizontal product leverage to multiple animal species; and

learning, modeling and efficiencies provided by the weaving of clinical indications between humans and animals.

Additional information on the reasons for the merger can be found below, beginning on page 230 of this joint proxy statement/prospectus for Jaguar and beginning on page 232 of this joint proxy statement/prospectus for Napo.

Q: Why is Jaguar asking to amend the 2014 Plan to increase the number of shares of Jaguar common stock authorized for issuance under the 2014 Plan?

A: Under the merger agreement, Jaguar will assume (i) each outstanding and unexercised option to purchase Napo common stock, which will be converted into options to purchase Jaguar common stock, (ii) each outstanding warrant to purchase Napo common stock, which will be converted into warrants to purchase Jaguar common stock, and (iii) each outstanding restricted stock unit to acquire Napo common stock, which will be converted into restricted stock units to acquire Jaguar common stock. Currently, Jaguar does not have a sufficient number of shares authorized for issuance under the 2014 Plan to cover the conversion of these Napo securities into Jaguar

Table of Contents

securities. Therefore, Jaguar must amend the 2014 Plan to authorize the issuance of additional shares so that Jaguar can meet its obligations to holders of the Napo options, warrants and restricted stock units under the merger agreement.

Q:

Why is Jaguar asking to adopt its Third Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 50 million shares to 225 million shares, authorize a class of non-voting common stock, require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and change the Jaguar corporate name to "Jaguar Health, Inc."?

A:

Approval of Jaguar's Third Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 50 million shares to 225 million shares, authorize a class of non-voting common stock, require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and change the Jaguar corporate name to "Jaguar Health, Inc." (which is the subject of Jaguar Proposal No. 5) is one of the conditions to the consummation of the merger. The merger consideration consists of a contingent right to receive Jaguar common stock for holders of Napo common stock and Jaguar common stock and non-voting common stock for Napo's creditors; thus, Jaguar must amend its Certificate of Incorporation to increase the number of authorized shares of common stock and to create this class of non-voting common stock. Shares of Jaguar non-voting common stock are the same in all respects to shares of Jaguar's common stock except that holders of shares of non-voting common stock are not entitled to vote on matters submitted to Jaguar stockholders other than a change of control of Jaguar, and shares of non-voting common stock are convertible into shares of common stock on a one-for-one basis (i) at the option of the respective holders thereof, at any time and from time to time on or after April 1, 2018 or (ii) automatically, without any payment of additional consideration by the holder thereof, (x) upon a transfer of such shares to any person or entity that is neither an affiliate of Nantucket nor an investment fund, investment vehicle or other account, that is, directly or indirectly, managed or advised by Nantucket or any of its affiliates pursuant to a sale of such stock to a third-party for cash in accordance with the terms and condition set forth in the Investor Rights Agreement, or (y) upon the release or transfer of such shares to the registered holders of Napo's outstanding shares of common stock immediately prior to the consummation of the merger (such shareholders sometimes referred to herein as the Napo Legacy Stockholders).

Q:

When do you expect the merger to be completed?

A:

Jaguar and Napo hope to complete the merger as soon as reasonably practicable, subject to receipt of stockholder approvals, which are proposals presented at the Jaguar special meeting and the Napo special meeting, and necessary regulatory approvals. Jaguar and Napo currently expect that the transaction will be completed in the second quarter of 2017. However, Jaguar and Napo cannot predict when regulatory review will be completed, whether or when regulatory or stockholder approval will be received or the potential terms and conditions of any regulatory approval that is received. In addition, certain other conditions to the merger, some of which are outside of the control of Jaguar and Napo, may not be satisfied until later in 2017 or at all. For a discussion of the conditions to the completion of the merger and of the risks associated with obtaining regulatory approvals in connection with the merger, see "The Merger Agreement and Related Agreements Conditions to Completion of the Merger" beginning on page 265 of this joint proxy statement/prospectus and "The Proposed Merger Regulatory Matters Relating to the Merger" beginning on page 249 of this joint proxy statement/prospectus.

Table of Contents

Q: Will the merger be taxable to stockholders of Jaguar?

A: No, the merger will not be taxable to stockholders of Jaguar, as they will continue to own their existing shares and the rights and privileges of their existing shares will not be affected by the merger.

Q: Will the merger be taxable to stockholders of Napo?

A: The merger will not qualify as a tax-free reorganization within the meaning of Section 368 of the Internal Revenue Code of 1986, as amended (sometimes referred to as the Code). Although it is not free from doubt, a Napo Stockholder should not recognize any taxable gain or loss until such Napo Stockholder's Certificate Delivery Date. The term "Certificate Delivery Date" means, with respect to each Napo Stockholder, the date on which such Napo Stockholder delivers to the Exchange Agent his, her or its Napo stock certificate(s) for cancellation, together with a letter of transmittal duly executed and completed in accordance with its terms and such other documents and/or payments of withholding taxes as may be reasonably required by the Exchange Agent or Jaguar. At that time, such Napo Stockholder will recognize gain or loss from the sale of his, her or its shares of Napo common stock in an amount equal to the difference between (i) the fair market value of a Merger Share on such Napo Stockholder's Certificate Delivery Date multiplied by the number of Merger Shares received by such Napo Stockholder (sometimes referred to as the Purchase Price) and (ii) such Napo Stockholder's tax basis in his, her or its shares of Napo common stock surrendered in the merger. Any such capital gain or capital loss will constitute long-term capital gain or loss if the Napo Stockholder's holding period for his, her or its shares of Napo common stock is more than one year as of the effective date of the merger. In addition, a portion of the Purchase Price received by each Napo Stockholder will constitute imputed interest that will be taxed at ordinary rates pursuant to Section 483 of the Code. The imputed interest rules of Section 483 apply regardless of whether a Napo Stockholder recognizes taxable gain or loss on the merger. However, if a Napo Stockholder recognizes capital gain on the merger, the amount of such capital gain is reduced dollar-for-dollar by the amount of the Napo Stockholder's imputed interest, and if a Napo Stockholder recognizes a capital loss on the merger, the amount of such capital loss will be increased dollar-for-dollar by the amount of the Napo Stockholder's imputed interest.

Q: Will there be any changes to the Jaguar Board if the merger becomes effective?

A: No. The merger agreement provides that the merger will not result in any change to the composition of the Jaguar Board. For more information, please see the section entitled "Management of the Combined Company After the Merger" beginning on page 173 of this joint proxy statement/prospectus.

Q: Are there any Jaguar or Napo stockholders already committed to vote in favor of the merger-related proposals?

A: Jaguar and Napo expect their respective executive officers and board members who own shares in the respective companies to vote in favor of the merger-related proposals. In addition, Napo, which owns in the aggregate approximately 19% of Jaguar common stock, is expected to vote in favor of the merger-related proposals.

Table of Contents

Q: What happens if Jaguar stockholders fail to approve the issuances of shares of Napo common stock and non-voting common stock, amend the 2014 Plan, or adopt Jaguar's Third Amended and Restated Certificate of Incorporation as contemplated by the merger agreement?

A: In this circumstance, either party is permitted to terminate the merger agreement, and no termination fee is payable by either Jaguar or Napo if the merger agreement is terminated upon the occurrence of this event. However, if the merger fails to close for any reason on or prior to July 31, 2017, other than as a result directly or indirectly of (x) lack of stockholder approval by either party or (y) Napo's failure to comply with, or breach of the provisions of the terms of the Binding Agreement of Terms for Jaguar Animal Health, Inc. Acquisition of Napo Pharmaceuticals, Inc., dated February 8, 2017, between Jaguar and Napo (sometimes referred to herein as the Binding Agreement of Terms) or the merger documents, then on or before the close of business on August 7, 2017, Jaguar will issue 2,000,000 shares of its restricted common stock to Napo. See "The Merger Agreement and Related Agreements Termination" and " Termination Fee and Expenses" each beginning on page 266 of this joint proxy statement/prospectus.

Except as set forth above, whether or not the merger is completed, all costs and expenses incurred in connection with the merger agreement and the transactions contemplated by the merger agreement will be paid by the party incurring those costs or expenses.

Q: What happens if Napo stockholders fail to adopt the merger agreement and the transactions contemplated thereby?

A: In this circumstance, either party is permitted to terminate the merger agreement, and no termination fee is payable by either Napo or Jaguar if the merger agreement is terminated upon the occurrence of this event. See "The Merger Agreement and Related Agreements Termination" and " Termination Fee and Expenses" both beginning on page 266, of this joint proxy statement/prospectus.

Q: Am I entitled to exercise appraisal rights instead of receiving the per share merger consideration for my shares of Napo common stock?

A: Napo stockholders are entitled to appraisal rights under Section 262, provided they fully comply with and follow the procedures and satisfy the conditions set forth in Section 262. For more information regarding appraisal rights, see the section entitled "Appraisal Rights" beginning on page 23 of this joint proxy statement/prospectus. In addition, a copy of Section 262 is attached as *Annex D* to this joint proxy statement/prospectus. Failure to comply with Section 262 will result in your waiver of, or inability to exercise, appraisal rights.

Q: Are there risks that I, as a Jaguar stockholder, should consider in deciding to vote on the issuances of shares of Jaguar common stock and non-voting common stock, the amendment of the 2014 Plan, and the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation, as contemplated by the merger agreement or, as a Napo stockholder, should consider in deciding to vote on the adoption of the merger agreement?

A: Yes. In evaluating the approval of the issuance of shares of Jaguar common stock and non-voting common stock, the amendment of the 2014 Plan, and/or the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation as contemplated by the merger agreement, you should carefully read this joint proxy statement/prospectus, including the risk factors discussed in the section entitled "Risk Factors" beginning on page 24 of this joint proxy statement/prospectus.

Q: Who can answer any questions I may have about the merger?

A: Jaguar stockholders may call [•], Jaguar's proxy solicitors for the special meeting, toll-free at [•]. Napo stockholders may call [•] at [•] or email [•].

Table of Contents

SUMMARY THE MERGER

This summary highlights selected information contained in this joint proxy statement/prospectus and does not contain all the information that may be important to you. Jaguar and Napo urge you to read carefully this joint proxy statement/prospectus in its entirety, including the Annexes. Unless stated otherwise, all references in this joint proxy statement/prospectus to Jaguar refer to Jaguar Animal Health, Inc., a Delaware corporation, all references to Napo refer to Napo Pharmaceuticals, Inc., a Delaware corporation, all references to Merger Sub refer to Napo Acquisition Corporation, a Delaware corporation, and all references to the merger agreement refer to the Agreement and Plan of Merger, dated as of March 31, 2017, by and among Jaguar, Merger Sub, Napo and a Napo representative, a copy of which is attached as Annex A to this joint proxy statement/prospectus and is incorporated by reference into this joint proxy statement/prospectus. See "Where you Can Find More Information" beginning on page 293.

The Companies Involved in the Merger

Jaguar

Jaguar Animal Health, Inc.
201 Mission Street, Suite 2375
San Francisco, CA 94105
(415) 371-8300

Jaguar is an animal health company focused on developing and commercializing first-in-class gastrointestinal products for companion and production animals, foals, and high value horses. Jaguar was founded in San Francisco, California as a Delaware corporation on June 6, 2013. Napo formed Jaguar to develop and commercialize animal health products. Effective as of December 31, 2013, Jaguar was a wholly-owned subsidiary of Napo, and until May 13, 2015, Jaguar was a majority-owned subsidiary of Napo.

For additional information about Jaguar, see "Jaguar Business" beginning on page 86.

Napo

Napo Pharmaceuticals, Inc.
201 Mission Street, Suite 2375
San Francisco, CA 94105
(415) 963-9938

Napo Pharmaceuticals, Inc. ("Napo") focuses on the development and commercialization of proprietary pharmaceuticals for the global marketplace from plants traditionally used in rainforest areas. In October 2016 Napo launched Mytesi (formerly known as Fulyzaq), a human drug approved by the U.S. FDA for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy (ART). The active pharmaceutical ingredient (API) in Mytesi is crofelemer, Napo's proprietary, patented gastrointestinal anti-secretory agent sustainably harvested from the rainforest. Napo was founded in San Francisco, California as a Delaware corporation on November 15, 2001.

For additional information about Napo, see "Napo Business" beginning on page 118.

Merger Sub

Merger Sub, a wholly-owned subsidiary of Jaguar, is a Delaware corporation formed on March 30, 2017 for the sole purpose of effecting the merger. Upon completion of the merger, Merger Sub will merge with and into Napo, with Napo surviving as a wholly-owned subsidiary of Jaguar after the merger.

Table of Contents

The Proposed Merger

Each of the Jaguar Board and Napo Board has approved the merger of Jaguar and Napo. Jaguar and Napo have entered into the merger agreement pursuant to which Napo will merge with Merger Sub, a newly formed, wholly-owned subsidiary of Jaguar, with Napo surviving the merger as a wholly-owned subsidiary of Jaguar. At the effective time of the merger, (i) each issued and outstanding share of Napo common stock (other than dissenting shares and shares held by Jaguar or Napo) will be converted into a contingent right to receive (x) up to a whole number of shares of Jaguar common stock comprising in the aggregate up to approximately 21.5% of the fully diluted shares of Jaguar common stock immediately following the consummation of the merger, which contingent right will vest only if the resale of the Tranche A Shares to third parties provides Nantucket with specified cash returns over a specified period of time (sometimes referred to herein as the Hurdle Amounts), and (y) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, additional shares of the Jaguar common stock (equal to 50% of the unsold Tranche A shares), which will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units, (ii) existing creditors of Napo (inclusive of Nantucket) will be issued in the aggregate approximately 43,156,649 shares of Jaguar non-voting common stock and 2,005,245 shares of Jaguar voting common stock in full satisfaction of all existing indebtedness then owed by Napo to such creditors, and (iii) an existing Napo stockholder (sometimes referred to herein as Invesco) will be issued an aggregate of approximately 3,243,243 shares of Jaguar common stock in return for \$3 million of new funds invested into Jaguar by such investor, which will be immediately loaned to Napo to partially facilitate the extinguishment of the debt that Napo owes to Nantucket. At closing, it is contemplated that unless consented to or waived by Jaguar, Napo will have no more than (a) \$11.3 million in secured and unsecured debt for monies borrowed (a portion of such debt proceeds which will be used to pay off Napo's secured debt owed to Nantucket), (b) \$6.2 million of trade payables and certain other debt, excluding transaction expenses and (c) Napo's cash at closing will be no less than \$500,000.

Shares of Jaguar non-voting common stock have the same rights to dividends and other distributions and are convertible into shares of common stock on a one-for-one basis (x) upon transfers to non-affiliates of Nantucket, (y) upon the release from escrow of certain non-voting shares held by Nantucket to the legacy stockholders of Napo under specified conditions and (z) at any time on or after April 1, 2018 at the option of the respective holders thereof.

Jaguar will assume (i) each outstanding and unexercised option to purchase Napo common stock, which will be converted into options to purchase Jaguar common stock, (ii) each outstanding warrant to purchase Napo common stock, which will be converted into warrants to purchase Jaguar common stock, and (iii) each outstanding restricted stock unit to acquire Napo common stock, which will be converted into restricted stock units to acquire Jaguar common stock.

The stockholders of Jaguar will continue to own their existing shares and the rights and privileges of their existing shares will not be affected by the merger. However, because Jaguar will be issuing new shares of Jaguar common stock and non-voting common stock to Napo creditors, contingent rights to receive Jaguar common stock to Napo stockholders, and options, warrants and restricted stock units exercisable for Jaguar common stock to holders of Napo options, warrants and restricted stock units in the merger, the stockholders of Jaguar will experience dilution as a result of the issuance of shares in the transactions contemplated by the merger and each outstanding share of Jaguar common stock immediately prior to the merger will represent a smaller percentage of the total number of shares of Jaguar common stock and non-voting common stock issued and outstanding after the merger. It is expected that Jaguar stockholders before the merger will hold approximately 25% of the total Jaguar common stock and non-voting common stock issued and outstanding immediately following completion of the merger. Thus, Jaguar stockholders before the merger will experience dilution in the amount of 75% as a result of the merger.

Table of Contents

A copy of the merger agreement is attached as *Annex A* to this joint proxy statement/prospectus. Jaguar and Napo encourage you to read the entire merger agreement carefully because they are the principal documents governing the merger. For more information on the merger agreement, see "The Merger Agreement and Related Agreements" beginning on page 256.

The merger is expected to be completed during the second quarter of 2017, subject to the satisfaction or waiver of the closing conditions.

Merger Consideration

At the effective time of the merger:

- (i) each issued and outstanding share of Napo common stock (other than dissenting shares and shares held by Jaguar or Napo) will be converted into a contingent right to receive (x) up to a whole number of shares of Jaguar common stock comprising in the aggregate up to approximately 21.5% of the fully diluted shares of Jaguar common stock immediately following the consummation of the merger, which contingent right will vest only if the resale of the Tranche A Shares to third parties provides Nantucket with sufficient proceeds to satisfy the applicable Hurdle Amount and (y) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, additional shares of the Jaguar common stock (equal to 50% of the unsold Tranche A shares), which will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units;
- (ii) existing creditors of Napo will receive an aggregate of not more than 2,005,245 shares of Jaguar common stock and not more than 43,156,649 shares of Jaguar non-voting common stock in full satisfaction of all existing indebtedness then owed by Napo to such creditors;
- (iii) an existing Napo stockholder will be issued an aggregate of 3,243,243 shares of Jaguar common stock in return for \$3 million of new funds invested into Jaguar by such investor, which will be immediately loaned to Napo to partially facilitate the extinguishment of the debt that Napo owes to Nantucket;
- (iv) each option to purchase shares of Napo common stock outstanding and unexercised immediately prior to the effective time of the merger will be assumed by Jaguar and will become an option to purchase shares of Jaguar common stock, with the number of shares subject to each such option equal to the product of the number of shares of Napo common stock previously subject to the Napo option and 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger), rounded down to the next whole share;
- (v) each warrant to purchase shares of Napo common stock outstanding and unexercised immediately prior to the effective time of the merger will be assumed by Jaguar and will become a warrant to purchase shares of Jaguar common stock, with the number of shares subject to each such warrant equal to the product of the number of shares of Napo common stock previously subject to the Napo warrant and 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger), rounded down to the next whole share; and
- (vi) each restricted stock unit to acquire shares of Napo common stock outstanding and unexercised immediately prior to the effective time of the merger will be assumed by Jaguar and will become a restricted stock unit to acquire shares of Jaguar common stock, which will be governed by the terms of the Jaguar 2014 Stock Plan.

Table of Contents

Based upon the current number of issued and outstanding shares of Napo common stock, an aggregate of approximately 69,299,346 shares of Jaguar common stock and non-voting common stock will be issued upon the closing of the merger on a fully diluted basis, assuming the exercise or conversion of all outstanding options and warrants other than those options and warrants exercisable or convertible for approximately 300,000 shares of Jaguar common stock with an exercise/conversion price of \$5.00 or more. Jaguar will not issue any fractional shares in the merger. Instead, any fractional shares will be rounded down to the next whole number of shares.

For a more complete description of the merger consideration, see "The Merger Agreement and Related Agreements Merger Consideration" beginning on page 256.

Treatment of Stock Options and Warrants

Jaguar will assume outstanding options and warrants to purchase shares of Napo common stock in the merger. Each outstanding option and warrant to acquire Napo common stock will be converted automatically at the effective time of the merger into an option or warrant to acquire Jaguar common stock. Each option will thereafter be governed by the terms of the 2014 Jaguar Stock Incentive Plan. The number of shares of Jaguar common stock for which each option or warrant is exercisable will be equal to the product of the number of shares of Napo common stock previously subject to the Napo option or warrant and 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger), rounded down to the next whole share, and the exercise price of each option or warrant will be equal to the exercise price for each share of Napo common stock previously subject to the option or warrant immediately prior to completion of the merger, divided by 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger), rounded up to the nearest whole cent. In addition, the vesting and forfeiture provisions applicable to the converted options shall remain the same as the Napo options. As of March 31, 2017, there were outstanding options and warrants to purchase up to 9,711,443 shares of Napo common stock, at exercise prices of \$0.10 to \$0.55328. For a more complete discussion of the treatment of Napo options and other stock-based awards, see "The Merger Agreement and Related Agreements Treatment of Napo Options and Warrants" beginning on page 259.

Directors and Executive Management of Jaguar Following the Merger

The current board of directors and executive management of Jaguar will remain unchanged following the merger.

For a more complete discussion of the directors and management of Jaguar after the merger, see "Management of the Combined Company After the Merger" beginning on page 173.

Recommendation of the Jaguar Board

After careful consideration, the Jaguar Board unanimously recommends that holders of Jaguar common stock vote "**FOR**" the issuance of Jaguar common stock and non-voting common stock in connection with the merger, vote "**FOR**" the issuance of shares of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019, vote "**FOR**" the issuance of \$3,000,000 of Jaguar common stock at a price equal to \$0.925 per share to Invesco pursuant to the Invesco Commitment Letter, "**FOR**" the amendment of the 2014 Plan, vote "**FOR**" the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation to authorize a class of non-voting common stock and change the Jaguar corporate name to "Jaguar Health, Inc.", and vote "**FOR**" the adjournment of the special meeting if necessary or advisable to permit further solicitation of proxies in

Table of Contents

the event there are not sufficient votes at the time of the special meeting to approve all matters brought before the meeting.

For a more complete description of Jaguar's reasons for the merger and the recommendations of the Jaguar Board, see "The Proposed Merger Recommendation of the Jaguar Board and its Reasons for the Merger" beginning on page 230.

Recommendation of the Napo Board

After careful consideration, the Napo Board unanimously recommends that holders of Napo common stock vote "**FOR**" the adoption of the merger agreement and approval of the merger and vote "**FOR**" the adjournment of the special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to adopt the merger agreement and approve the merger. It should be noted that in connection with the merger, the Napo Board will receive indemnification for acts or omissions occurring prior to the effective time of the merger. The merger agreement also provides that, from and after the effective time of the merger, Napo will provide exculpation, indemnification and advancement expenses for each former director, officer, employee or agent of Napo to cover actions at or prior to the effective time of the merger, including all transactions contemplated by the merger agreement, which is at least as favorable in scope and amount as the exculpation, indemnification and advancement of expenses provided to such former director, officer, employee or agent of Napo prior to the effective time of the merger.

For a more complete description of Napo's reasons for the merger and the recommendation of the Napo Board, see "The Proposed Merger Recommendation of the Napo Board and its Reasons for the Merger" beginning on page 232.

Opinion of Jaguar Financial Advisor

In connection with the merger and certain related transactions described in the merger agreement (sometimes referred to herein collectively as the Transaction), the Jaguar Board received a written opinion from Stifel, Nicolaus & Company, Incorporated (sometimes referred to as Stifel), as to the fairness, from a financial point of view and as of the date of its opinion, to Jaguar of the transaction consideration (as described in the opinion) to be issued by Jaguar in the Transaction (as described in the opinion). The full text of Stifel's written opinion, dated March 28, 2017, is attached to this joint proxy statement/prospectus as *Annex C*. Holders of Jaguar common stock are encouraged to read this opinion carefully in its entirety for a description of the assumptions made, procedures followed, matters considered and limitations on the review undertaken. **Stifel's Opinion was for the information of, and directed to, the Jaguar Board for its information and assistance in connection with its consideration of the financial terms of the Transaction. Stifel's Opinion did not constitute a recommendation to the Jaguar Board as to how the Jaguar Board should vote or otherwise act with respect to the Transaction or any other matter, or to any stockholder of Jaguar or Napo as to how any such stockholder should vote or act with respect to the Transaction or any other matter, or whether or not any stockholder of Jaguar or Napo should enter into a voting, stockholders', affiliates' or similar agreement with respect to the Transaction or exercise any dissenters', appraisal or similar rights that may be available to such stockholder. In addition, Stifel's Opinion did not compare the relative merits of the Transaction with any other alternative transactions or business strategies which may have been available to Jaguar, did not address the underlying business decision of the Jaguar Board or Jaguar to proceed with or effect the Transaction and did not address the form or structure of the merger or any other part of the Transaction or any individual transaction or group of transactions that is or are part of the Transaction.**

Table of Contents

For a more complete description of Stifel's opinion, see "The Proposed Merger Opinion of Jaguar Financial Advisor" beginning on page 234. See also *Annex C* to this joint proxy statement/prospectus.

Interests of Certain Jaguar and Napo Directors and Executive Officers in the Merger

You should be aware that some of Jaguar and Napo's directors and executive officers may have interests in the transaction that may be different from, or in addition to, the interests of stockholders of Jaguar and Napo, respectively.

For a further discussion of interests of certain Napo directors and executive officers in the merger, see "Additional Interests of Certain of Jaguar and Napo's Directors and Executive Officers in the Merger" beginning on page 252.

Material United States Federal Income Tax Consequences of the Merger

The merger will not be taxable to stockholders of Jaguar, as they will continue to own their existing shares and the rights and privileges of their existing shares will not be affected by the merger.

The merger will not qualify as a tax-free reorganization within the meaning of Section 368 of the Internal Revenue Code of 1986, as amended (sometimes referred to as the Code). Although it is not free from doubt, a Napo Stockholder should not recognize any taxable gain or loss until such Napo Stockholder's Certificate Delivery Date. The term "Certificate Delivery Date" means, with respect to each Napo Stockholder, the date on which such Napo Stockholder delivers to the Exchange Agent his, her or its Napo stock certificate(s) for cancellation, together with a letter of transmittal duly executed and completed in accordance with its terms and such other documents and/or payments of withholding taxes as may be reasonably required by the Exchange Agent or Jaguar. At that time, such Napo Stockholder will recognize gain or loss from the sale of his, her or its shares of Napo common stock in an amount equal to the difference between (i) the fair market value of a Merger Share on such Napo Stockholder's Certificate Delivery Date multiplied by the number of Merger Shares received by such Napo Stockholder (sometimes referred to as the Purchase Price) and (ii) such Napo Stockholder's tax basis in his, her or its shares of Napo common stock surrendered in the merger. Any such capital gain or capital loss will constitute long-term capital gain or loss if the Napo Stockholder's holding period for his, her or its shares of Napo common stock is more than one year as of the effective date of the merger. In addition, a portion of the Purchase Price received by each Napo Stockholder will constitute imputed interest that will be taxed at ordinary rates pursuant to Section 483 of the Code. The imputed interest rules of Section 483 apply regardless of whether a Napo Stockholder recognizes taxable gain or loss on the merger. However, if a Napo Stockholder recognizes capital gain on the merger, the amount of such capital gain is reduced dollar-for-dollar by the amount of the Napo Stockholder's imputed interest, and if a Napo Stockholder recognizes a capital loss on the merger, the amount of such capital loss will be increased dollar-for-dollar by the amount of the Napo Stockholder's imputed interest.

Tax matters are very complicated and the tax consequences of the merger to you, if you are a Napo stockholder, will depend upon the facts of your situation. In addition, you may be subject to state, local or foreign tax laws that are not addressed in this joint proxy statement/prospectus. You are urged to consult with your own tax advisors for a full understanding of the tax consequences of the merger to you.

For a more complete description of the material United States federal income tax consequences of the merger, see "The Proposed Merger Material United States Federal Income Tax Consequences of the Merger" beginning on page 246.

Table of Contents

Accounting Treatment of the Merger

It is anticipated that the merger will be accounted for as an acquisition by Jaguar of Napo under the acquisition method of accounting according to United States generally accepted accounting principles.

Regulatory Matters

Neither Jaguar nor Napo is required to make any filings or to obtain approvals or clearances from any antitrust regulatory authorities in the United States or other countries to complete the merger. In the United States, Jaguar must comply with applicable federal and state securities laws and the rules and regulations of The NASDAQ Stock Market LLC in connection with the issuance of shares of Jaguar's common stock in the merger, including the filing with the SEC of this proxy statement/prospectus/information statement. The merger agreement provides that Napo and Jaguar shall obtain all necessary actions or nonactions, waivers, consents and approvals from governmental entities or other persons necessary in connection with the consummation of the merger and the other transactions contemplated by the merger agreement and take all reasonable steps as may be necessary to obtain an approval or waiver from, or to avoid any action or proceeding by, any governmental entity or other persons necessary in connection with the consummation of the merger and the other transactions contemplated by the merger agreement. For a more complete discussion of the regulatory matters relating to the merger, see "The Proposed Merger Regulatory Matters Relating to the Merger" beginning on page 249.

Conditions to Completion of the Merger

Jaguar and Napo expect to complete the merger after all the conditions to the merger in the merger agreement are satisfied or waived, including after the receipt of stockholder approvals at their respective stockholder meetings. In addition to obtaining such stockholder approvals, each of the other closing conditions set forth in the merger agreement must be satisfied. Jaguar and Napo currently expect to complete the merger during the second quarter of 2017. However, it is possible that factors outside of either company's control could cause the merger to be completed at a later time or not at all. The merger agreement provides that the conditions to the closing of the merger may be waived, in whole or in part, by Jaguar or Napo, to the extent legally allowed. Neither Jaguar nor Napo currently expects to waive any immaterial or material condition to the completion of the merger. If either Jaguar or Napo determines to waive any material condition to the merger and such waiver renders the disclosure in this joint proxy statement/prospectus materially misleading, proxies will be resolicited from the Jaguar and/or Napo stockholders, as applicable.

For a more complete discussion of the conditions to the merger, see "The Merger Agreement and Related Agreements Conditions to Completion of the Merger" beginning on page 265.

No Solicitation of Other Offers

The merger agreement contains certain restrictions on the ability of Napo to solicit or engage in discussions or negotiations with a third party with respect to a proposal to acquire Napo's equity or assets.

For a discussion of the prohibition on solicitation of acquisition proposals from third parties, see "The Merger Agreement and Related Agreements Non-Solicitation" beginning on page 265.

Termination

Jaguar and Napo may mutually agree at any time prior to the completion of the merger (including after stockholder approval) to terminate the merger agreement and abandon the merger. In addition,

Table of Contents

the merger agreement may be terminated by either Jaguar or Napo under certain circumstances or upon the occurrence of certain events.

For a discussion of termination provisions of the merger agreement, see "The Merger Agreement and Related Agreements Termination" beginning on page 266.

Termination Fees and Expenses

If the merger fails to close for any reason on, or prior to, July 31, 2017, other than as a result directly or indirectly of (x) lack of stockholder approval by either party or (y) Napo (i) fails to perform in accordance with the terms and conditions of the Binding Agreement of Terms for Jaguar Animal Health, Inc. Acquisition of Napo Pharmaceuticals, Inc., dated February 8, 2017, between Jaguar and Napo (sometimes referred to herein as the Binding Agreement of Terms) or the merger documents or (ii) fails to abide by or breaches the provisions or representations, warranties and covenants of the Binding Agreement of Terms or the merger documents, then on, or before, the close of business on August 7, 2017, Jaguar will issue 2,000,000 shares of its restricted common stock to Napo (sometimes referred to herein as the Break-Up Fee). See "The Merger Agreement and Related Agreements Termination Fee and Expenses" and "Effect of Termination," beginning on pages 266 and 267, respectively.

Shares Beneficially Owned by Directors and Executive Officers of Jaguar and Napo

Jaguar's directors and executive officers beneficially owned [•] shares of Jaguar common stock on [•], 2017, the record date for the special meeting. These shares represent in total [•]% of the total voting power of Jaguar's voting securities outstanding and entitled to vote as of the record date. To approve the issuance of shares of Jaguar common stock and non-voting common stock in the transactions contemplated by the merger agreement (Proposal 1), the affirmative vote of, if a quorum is present at the special meeting, the holders of a majority of shares of Jaguar common stock, present in person or represented by proxy at the special meeting, voting as a single class and entitled to vote, is required. Jaguar currently expects that Jaguar's directors and executive officers will vote their shares "**FOR**" all the proposals to be voted on at the special meeting, although none of them has entered into any agreements obligating them to do so.

Napo's directors and executive officers beneficially owned [•] shares of Napo common stock on [•], 2017, the record date for the special meeting. These shares represent in total [•]% of the total voting power of Napo's voting securities outstanding and entitled to vote as of the record date. Napo currently expects that its directors and executive officers will vote their shares "**FOR**" all the proposals to be voted on at the special meeting, although none of them has entered into any agreements obligating them to do so.

Appraisal Rights

Under Delaware law, Jaguar stockholders are not entitled to appraisal rights in connection with the issuance of shares of Jaguar common stock and non-voting common stock as contemplated by the merger agreement. Napo stockholders of record have appraisal rights under the Delaware General Corporation Law (sometimes referred to as the DGCL) in connection with the merger. For further discussion of appraisal rights, see "The Proposed Merger Appraisal Rights" beginning on page 249.

Comparison of the Rights of Jaguar and Napo Stockholders

The rights of Napo stockholders as Jaguar stockholders after the merger will be governed by Jaguar's Third Amended and Restated Certificate of Incorporation and amended and restated bylaws and the laws of the State of Delaware. Those rights differ from the rights of Napo stockholders under Napo's Fourth Amended and Restated Certificate of Incorporation, as amended, and amended and restated bylaws. See "Comparison of Rights of Jaguar and Napo Stockholders" beginning on page 282.

Table of Contents

RISK FACTORS

In addition to the other information included in this joint proxy statement/prospectus, including the matters addressed in the section entitled "Cautionary Statement Regarding Forward-Looking Statements" beginning on page 85, you should carefully consider the following risks before deciding how to vote, which include risks associated with the businesses of Jaguar and Napo. In addition, you should read and consider the risk factors associated with the businesses of Jaguar and Napo because those risks will also affect the combined company. Risks associated with the business of Jaguar and Napo can be found below. You should also read and consider the other information in this joint proxy statement/prospectus.

Risks Related to the Merger

The contingent rights that Napo stockholders are receiving in the merger may be exchanged for fewer shares of Jaguar stock than anticipated or none at all, depending on whether the resale of the Tranche A Shares to third parties provides Nantucket with sufficient proceeds to satisfy the applicable Hurdle Amount.

Of the 69,299,346 shares of Jaguar common stock and non-voting common stock to be issued by Jaguar in the transactions contemplated by the merger agreement and related Napo debt settlement, (x) up to approximately 19,900,202 shares of Jaguar common stock and (y) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, additional shares of the Jaguar common stock (equal to 50% of the unsold Tranche A Shares), which will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units (sometimes referred to herein collectively as the Merger Shares), are issuable upon the vesting of the contingent rights that the Napo stockholders are receiving in the merger (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger). A portion of the Merger Shares will initially be held in escrow (sometimes referred to herein as the Tranche B Shares) and will only be released to the Napo stockholders if the resale of the Tranche A Shares provides Nantucket with sufficient cash proceeds to satisfy the applicable Hurdle Amount. If Nantucket does not receive an amount equal to the Hurdle Amount from the sale of the Tranche A Shares before the third anniversary of the date on which the merger is consummated, then all of the Tranche B Shares then held in escrow will be released to Nantucket. As a result, Napo stockholders may receive fewer Merger Shares than anticipated or none at all, depending on whether the resale of the Tranche A Shares to third parties provides Nantucket with sufficient proceeds to satisfy the applicable Hurdle Amount. See "The Merger Agreement and Related Agreements Merger Consideration Calculation of Shares of Jaguar Common Stock Issuable to Holders of Contingent Rights."

Because the market price of Jaguar common stock will fluctuate, Napo stockholders cannot be sure of the market value of the Jaguar common stock that they will receive in the merger.

When Jaguar completes the merger, (i) each issued and outstanding share of Napo common stock (other than dissenting shares and shares held by Jaguar or Napo) will be converted into a contingent right to receive (x) up to a whole number of shares of Jaguar common stock comprising in the aggregate up to approximately 21.5% of the fully diluted shares of Jaguar common stock immediately following the consummation of the merger, which contingent right will vest only if the resale of the Tranche A Shares to third parties provides Nantucket with sufficient cash proceeds to satisfy the applicable Hurdle Amount and (y) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, additional shares of the Jaguar common stock (equal to 50% of the unsold Tranche A Shares), which will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units, (ii) existing creditors of Napo will receive an aggregate of not more than 43,156,649 shares of Jaguar non-voting common stock and not more than 2,005,245 shares of Jaguar voting common stock in full satisfaction of all existing indebtedness then owed by Napo to such creditors, and (iii) an existing Napo stockholder will be issued an aggregate of approximately 3,243,243

Table of Contents

shares of Jaguar common stock in return for \$3 million of new funds invested into Jaguar by such investor. The market value of Jaguar common stock will continue to fluctuate until the completion of the merger. For example, during the fourth quarter of 2016 and the first quarter of 2017, the closing sales price of Jaguar common stock ranged from a low of \$0.51 to a high of \$1.30, as reported on The NASDAQ Capital Market. On April 14, 2017 the closing sales price of Jaguar common stock was \$0.87. The merger agreement does not provide for any price-based termination right for either party. Accordingly, the market value of the shares of Jaguar common stock that Jaguar issues and Napo creditors and stockholders will be entitled to receive when the parties complete the merger will depend on the market value of shares of Jaguar common stock at the time that the parties complete the merger and could vary significantly from the market value on the date of this joint proxy statement/prospectus or the date of the Jaguar special meeting and the Napo special meeting.

The issuance of shares of Jaguar common stock and non-voting common stock to Napo stockholders in the transactions contemplated by the merger agreement will substantially dilute the interest in Jaguar held by Jaguar stockholders prior to the merger.

If the merger is completed, it is estimated that Jaguar will issue up to an aggregate of approximately 69,299,346 shares of Jaguar common stock and non-voting common stock upon the closing of the merger. Based on the number of shares of Jaguar common stock and Napo common stock issued and outstanding on the Jaguar and Napo record dates, the Napo Stakeholders will own, in the aggregate, approximately 75% of the aggregate number of shares of Jaguar common stock and non-voting common stock issued and outstanding immediately after the merger, on a fully diluted basis assuming the exercise or conversion of all outstanding options and warrants other than those options and warrants exercisable or convertible for approximately 300,000 shares of Jaguar common stock with an exercise/conversion price of \$5.00 or more. The issuance of shares of Jaguar common stock and non-voting common stock to the Napo Stakeholders will cause approximately a 75% reduction in the relative percentage interest of current Jaguar stockholders in the earnings, voting rights, liquidation value and book and market value of Jaguar. It is expected that Jaguar stockholders before the merger will hold approximately 25% of the total Jaguar common stock and non-voting common stock issued and outstanding immediately following completion of the merger on a fully diluted basis of Jaguar as of March 31, 2017, assuming the exercise or conversion of all outstanding options and warrants other than those options and warrants exercisable or convertible for approximately 300,000 shares of Jaguar common stock with an exercise/conversion price of \$5.00 or more. Thus, Jaguar stockholders before the merger will experience dilution in the amount of approximately 75% as a result of the merger.

Failure to complete the merger could adversely affect Jaguar's and Napo's stock prices and their future business and financial results.

Completion of the merger is subject to a number of conditions, including among other things, the receipt of approval of the Jaguar and Napo stockholders. There is no assurance that the parties will receive the necessary approvals or satisfy the other conditions to the completion of the merger. Failure to complete the proposed merger will prevent Jaguar and Napo from realizing the anticipated benefits of the merger. Each company will also remain liable for significant transaction costs, including legal, accounting and financial advisory fees, unless provided otherwise by the merger agreement. In addition, the market price of each company's common stock may reflect various market assumptions as to whether the merger will occur. Consequently, the failure to complete the merger could result in a significant change in the market price of the common stock of Jaguar and Napo.

Table of Contents

The market price of Jaguar common stock after the merger may be affected by factors different from those affecting the shares of Napo or Jaguar currently.

Upon completion of the merger and assuming the resale of the Tranche A shares to third parties provides Nantucket with sufficient proceeds to satisfy the applicable Hurdle Amount, holders of Napo common stock will become holders of Jaguar common stock. Jaguar's business differs in important respects from that of Napo, and, accordingly, the results of operations of the combined company and the market price of Jaguar common stock after the completion of the merger may be affected by factors different from those currently affecting the independent results of operations of each of Jaguar and Napo. For a discussion of the businesses of Jaguar and Napo and of certain factors to consider in connection with those businesses, see the risk factors included in this joint proxy statement/prospectus under the section entitled "Risk Factors Risks Related to Jaguar's Business" beginning on page 29, "Risk Factors Risks Related to Napo's Business" beginning on page 64, the description of Jaguar's business under the section entitled "Jaguar Business" beginning on page 86, and the description of Napo's business under the section entitled "Napo Business" beginning on page 118.

The unaudited pro forma combined condensed financial statements included in this document are preliminary and the actual financial condition and results of operations after the merger may differ materially.

The unaudited pro forma combined condensed financial statements in this joint proxy statement/prospectus are presented for illustrative purposes only and are not necessarily indicative of what Jaguar's actual financial condition or results of operations would have been had the merger been completed on the dates indicated. The unaudited pro forma combined condensed financial statements reflect adjustments to illustrate the effect of the merger had it been completed on the dates indicated, which are based upon preliminary estimates, to record the Napo identifiable assets acquired and liabilities assumed at fair value and the resulting goodwill recognized. The purchase price allocation for the merger reflected in this joint proxy statement/prospectus is preliminary, and final allocation of the purchase price will be based upon the actual purchase price and the fair value of the assets and liabilities of Napo as of the date of the completion of the merger. Accordingly, the final acquisition accounting adjustments may differ materially from the pro forma adjustments reflected in this document. For more information, see "Unaudited Pro Forma Combined Condensed Financial Statements" beginning on page 269.

Because certain directors and executive officers of Napo, as the case may be, are parties to agreements or are participants in other arrangements that give them interests that may be different from, or in addition to, your interests as a stockholder of Napo, these persons may have conflicts of interest in recommending that Napo stockholders vote to adopt the merger agreement and approve the merger.

The directors and executive officers of Napo, as the case may be, are parties to certain agreements or are participants in other arrangements that give them interests that may be different from, or in addition to, your interests as a stockholder of Napo. This difference of interests stems from the merger agreement providing that Napo will provide exculpation, indemnification and advancement expenses for each former director, officer, employee or agent of Napo to cover actions at or prior to the consummation of the merger, including all transactions contemplated by the merger agreement, which is at least as favorable in scope and amount as the exculpation, indemnification and advancement of expenses provided to such former director, officer, employee or agent of Napo prior to the consummation of the merger. The interests of the directors and executive officers of Napo in the merger that are different than those of the Napo stockholders are described under "Additional Interests of Certain of Jaguar and Napo's Directors and Executive Officers in the Merger" beginning on page 252.

Table of Contents

The merger agreement contains provisions that could discourage a potential alternative acquirer that might be willing to pay more to acquire Napo.

The merger agreement contains a "no shop" provision that restricts Napo's ability to solicit or facilitate proposals regarding a merger or similar transaction with another party. This provision could discourage a potential third party acquirer from considering or proposing an alternative acquisition, even if it were prepared to pay consideration with a higher value than that proposed to be paid in the merger.

Obtaining required approvals necessary to satisfy the conditions to the completion of the merger may delay or prevent completion of the merger.

To complete the merger, Jaguar stockholders must approve the issuance of shares of Jaguar common stock and non-voting common stock, amend the 2014 Plan, and adopt Jaguar's Third Amended and Restated Certificate of Incorporation, each as contemplated by the merger agreement, and Napo stockholders must adopt the merger agreement and approve the merger. In addition, the completion of the merger is conditioned upon the receipt of certain governmental authorizations, consents, orders or other approvals.

Jaguar and Napo intend to pursue all required approvals in accordance with the merger agreement. No assurance can be given that the required approvals will be obtained and, even if all such approvals are obtained, no assurance can be given as to the terms, conditions and timing of the approvals or that they will satisfy the terms of the merger agreement. See the sections entitled "The Merger Agreement and Related Agreements - Conditions to the Completion of the Merger" and "The Proposed Merger - Regulatory Matter Relating to the Merger" beginning on pages 265 and 249, respectively, for a discussion of the conditions to the completion of the merger.

The shares of Jaguar common stock and/or non-voting common stock to be received by Napo stockholders as a result of the merger, assuming the proceeds from the resale of the Tranche A Shares to third parties provides Nantucket with sufficient proceeds to satisfy the applicable Hurdle Amount, will have different rights from shares of Napo common stock.

Following completion of the merger, Napo stockholders will no longer be stockholders of Napo and will instead be stockholders of Jaguar only if the resale of the Tranche A Shares to third parties provides Nantucket with sufficient proceeds to satisfy the applicable Hurdle Amount. Although Napo and Jaguar are each incorporated under Delaware law, there will be important differences between the current rights of Napo stockholders and the rights of Jaguar stockholders, including the rights of holders of Jaguar common stock and non-voting common stock that may be important to Napo stockholders. See "Comparison of Rights of Jaguar and Napo Stockholders" beginning on page 282 for a discussion of the material differences between the rights associated with Napo common stock and Jaguar common stock and non-voting common stock.

The fairness opinion received by the Jaguar Board from Stifel does not reflect changes in circumstances subsequent to the date of the fairness opinion.

Stifel delivered to the Jaguar Board its opinion dated March 28, 2017. The opinion does not speak as of the time the merger will be completed or any date other than the date of such opinion. The opinion does not reflect changes that may occur or may have occurred after the date of the opinion, including changes to the operations and prospects of Napo or Jaguar, changes in general market and economic conditions or regulatory or other factors. Any such changes may materially alter or affect the relative values of Napo and Jaguar.

Table of Contents

If the NASDAQ Stock Market determines that the merger with Napo and the issuance of the merger consideration results in a change of control of the company, Jaguar may be required to submit a new application under NASDAQ's original listing standards and if such application is not approved, Jaguar's common stock may be delisted from The NASDAQ Capital Market.

Based upon the current number of issued and outstanding shares of Napo common stock, in connection with the transactions contemplated in the merger agreement and Napo debt settlement, Jaguar will issue up to an aggregate of approximately 69,299,346 shares of common stock. NASDAQ Rule 5110(a) provides that a company must apply for initial listing in connection with a transaction whereby a company combines with a non-NASDAQ entity, resulting in a change of control of such company and potentially allowing the non-NASDAQ entity to effectively obtain NASDAQ listing. In determining whether a change of control has occurred, NASDAQ considers all relevant factors including, changes in management, board of directors, voting power, ownership and financial structure of Jaguar. If The NASDAQ Stock Market determines that a change of control does in fact result from the consummation of the merger and the issuance of the merger consideration and an original listing application has not been approved prior to the consummation of merger, Jaguar will be in violation of NASDAQ Rule 5110(a) and Jaguar common stock could be delisted from The NASDAQ Capital Market.

Termination of the merger agreement could negatively impact Napo or Jaguar.

If the merger agreement is terminated, there may be various consequences. For example, Napo's or Jaguar's businesses may have been impacted adversely by the failure to pursue other beneficial opportunities due to the focus of management on the merger, without realizing any of the anticipated benefits of completing the merger. Additionally, if the merger agreement is terminated, the market price of Napo's or Jaguar's common stock could decline to the extent that the current market prices of Jaguar common stock and Napo common stock reflect a market assumption that the merger will be completed.

The market price of Jaguar common stock after the merger may be affected by factors different from those currently affecting Jaguar shares.

Upon completion of the merger, holders of Napo common stock will become holders of Jaguar common stock only if the resale of the Tranche A Shares to third parties provides Nantucket with sufficient proceeds to satisfy the applicable Hurdle Amount. Jaguar's business differs in important respects from that of Napo, and, accordingly, the results of operations of the combined company and the market price of Jaguar common stock after the completion of the merger may be affected by factors different from those currently affecting Jaguar's operations.

The pendency of the merger could have an adverse effect on Jaguar's and Napo's stock prices, business, financial condition, results of operations or business prospects.

While neither Jaguar nor Napo is aware of any significant adverse effects to date, the pendency of the merger could disrupt Jaguar's and/or Napo's businesses in the following ways, among others:

customers and other third-party business partners of Jaguar or Napo may seek to terminate and/or renegotiate their relationships with Jaguar or Napo as a result of the merger, whether pursuant to the terms of their existing agreements with Jaguar or Napo or otherwise;

the attention of Jaguar and/or Napo management may be directed toward the completion of the merger and related matters and may be diverted from the day-to-day business operations of their respective companies, including from other opportunities that might otherwise be beneficial to Jaguar or Napo; and

Table of Contents

current and prospective employees may experience uncertainty regarding their future roles with the combined company, which might adversely affect Jaguar's and/or Napo's ability to retain, recruit and motivate key personnel.

Should they occur, any of these matters could adversely affect the stock prices of, or harm the financial condition, results of operations or business prospects of, Jaguar and/or Napo.

Risks Related to Jaguar's Business

Jaguar has a limited operating history, expects to incur further losses as it grows and may be unable to achieve or sustain profitability. Jaguar's independent registered public accounting firm has expressed substantial doubt about its ability to continue as a going concern.

Since formation in June 2013, Jaguar's operations have been primarily limited to the research and development of its lead prescription drug product candidate, Canalevia, to treat various forms of diarrhea in dogs, and Jaguar's non-prescription product, Neonorm Calf, to help dairies and calf farms proactively retain fluid in calves helping the animals avoid debilitating, dangerous levels of dehydration, and the recent commercial launch of Neonorm Foal. As a result, Jaguar has limited meaningful historical operations upon which to evaluate its business and prospects and have not yet demonstrated an ability to broadly commercialize any of its products, obtain any required marketing approval for any of its prescription drug product candidates or successfully overcome the risks and uncertainties frequently encountered by companies in emerging fields such as the animal health industry. Jaguar also has not generated any material revenue to date, and expects to continue to incur significant research and development and other expenses. Jaguar's net loss and comprehensive loss for the year ended December 31, 2016 was \$14.7 million. As of December 31, 2016, Jaguar had total stockholders' deficit of \$2.5 million. Jaguar expects to continue to incur losses for the foreseeable future, which will increase significantly from historical levels as it expands its product development activities, seeks necessary approvals for its product candidates, conducts species-specific formulation studies for its non-prescription products and begins commercialization activities. Even if Jaguar succeeds in developing and broadly commercializing one or more of its products or product candidates, Jaguar expects to continue to incur losses for the foreseeable future, and Jaguar may never become profitable. If Jaguar fails to achieve or maintain profitability, then it may be unable to continue its operations at planned levels and be forced to reduce or cease operations.

As more fully discussed in Note 1 to Jaguar's Financial Statements, Jaguar believes there is substantial doubt about its ability to continue as a going concern as it does not currently have sufficient cash resources to fund its operations through February 15, 2018, or one year from the filing date of its Form 10-K. Jaguar's financial statements do not include any adjustments that may result from the outcome of this uncertainty. If Jaguar is unable to continue as a viable entity, Jaguar's stockholders may lose their entire investment.

Jaguar has never generated any material revenue from operations and may not generate any material revenue from its operations in the foreseeable future.

Jaguar is an animal health company focused on developing and commercializing prescription drug and non-prescription products for companion and production animals, foals, and high value horses. Since inception in June 2013, Jaguar has not generated any material revenue from operations. There is no guarantee that Jaguar's recent commercial launch of Neonorm Calf for preweaned dairy calves in the United States will be successful or that Jaguar will be able to sell any products in the future. Further, in order to commercialize its prescription drug product candidates, Jaguar must receive regulatory approval from the FDA in the United States and other regulatory agencies in various jurisdictions. Jaguar has not yet received any regulatory approvals for its prescription drug product candidates. In addition, certain of its non-prescription products, such as Neonorm Calf, may be subject

Table of Contents

to regulatory approval outside the United States prior to commercialization. Accordingly, until and unless Jaguar receives any necessary regulatory approvals, Jaguar cannot market or sell its products. Moreover, even if Jaguar receives the necessary approvals, Jaguar may not be successful in generating revenue from sales of its products as it does not have any meaningful experience marketing or distributing its products. Accordingly, Jaguar may never generate any material revenue from its operations.

Jaguar expects to incur significant additional costs as it continues commercialization efforts for Neonorm, and undertakes the clinical trials necessary to obtain regulatory approvals for Canalevia and Equilevia, which will increase Jaguar's losses.

Jaguar commenced sales of Neonorm for preweaned dairy calves in the United States under the brand name Neonorm Calf at the end of 2014. Jaguar will need to continue to invest in developing its internal and third-party sales and distribution network and outreach efforts to key opinion leaders in the dairy industry, including veterinarians. Jaguar will also need to conduct clinical trials for Equilevia and Canalevia in order to obtain necessary initial regulatory approvals and to subsequently broaden Canalevia to additional indications and additional species. Jaguar will also need to conduct species-specific testing with Neonorm to expand to additional animal populations.

Jaguar is actively identifying additional products for development and commercialization, and will continue to expend substantial resources for the foreseeable future to develop Equilevia, Canalevia and Neonorm and develop products from the library of over 2,300 medicinal plants that Jaguar has licensed. These expenditures will include costs associated with:

identifying additional potential prescription drug product candidates and non-prescription products;

formulation studies;

conducting pilot, pivotal and toxicology studies;

completing other research and development activities;

payments to technology licensors;

maintaining Jaguar's intellectual property;

obtaining necessary regulatory approvals;

establishing commercial supply capabilities; and

sales, marketing and distribution of Jaguar's commercialized products.

Jaguar also may incur unanticipated costs in connection with developing and commercializing its products. Because the outcome of Jaguar's development activities and commercialization efforts is inherently uncertain, the actual amounts necessary to successfully complete the development and commercialization of Jaguar's current or future products and product candidates may be greater than Jaguar anticipates.

Because Jaguar anticipates incurring significant costs for the foreseeable future, if Jaguar is not successful in broadly commercializing any of its current or future products or product candidates or raising additional funding to pursue its research and development efforts, Jaguar may never realize the benefit of its development efforts and its business may be harmed.

Table of Contents

Jaguar will need to raise substantial additional capital in the future to fund its operations and Jaguar may be unable to raise such funds when needed and on acceptable terms, which would force Jaguar to delay, limit, reduce or terminate one or more of its product development programs or future commercialization efforts.

Jaguar is forecasting continued losses and negative cash flows as it continues to fund its operating and marketing activities and research and development programs, and Jaguar will not have sufficient cash on hand to fund its operating plan through August 2017 and to complete the development of all the current products in Jaguar's pipeline, or any additional products Jaguar may identify. Jaguar will need to seek additional funds sooner than planned through public or private equity or debt financings or other sources such as strategic collaborations. Other than the loan and security agreement (which provided for an initial loan commitment of \$6.0 million) and the common stock purchase agreement, or the CSPA, with Aspire Capital Fund, LLC, or Aspire Capital (which committed Aspire Capital to purchase up to an aggregate of \$15.0 million of Jaguar's shares of common stock over the term of the CSPA), Jaguar has no current agreements or arrangements with respect to any such financings or collaborations, and any such financings or collaborations may result in dilution to Jaguar's stockholders, the imposition of debt covenants and repayment obligations or other restrictions that may harm Jaguar's business or the value of Jaguar common stock. Jaguar may also seek from time to time to raise additional capital based upon favorable market conditions or strategic considerations such as potential acquisitions.

Jaguar's future capital requirements depend on many factors, including, but not limited to:

the scope, progress, results and costs of researching and developing Jaguar's current and future prescription drug product candidates and non-prescription products;

the timing of, and the costs involved in, obtaining any regulatory approvals for Jaguar's current and any future products;

the number and characteristics of the products Jaguar pursues;

the cost of manufacturing Jaguar's current and future products and any products Jaguar successfully commercializes;

the cost of commercialization activities for Neonorm, Equilevia and Canalevia, if approved, including sales, marketing and distribution costs;

the expenses needed to attract and retain skilled personnel;

the costs associated with being a public company;

Jaguar's ability to establish and maintain strategic collaborations, distribution or other arrangements and the financial terms of such agreements; and

the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing possible patent claims, including litigation costs and the outcome of any such litigation.

Additional funds may not be available when Jaguar needs them on terms that are acceptable to Jaguar, or at all. If adequate funds are not available to us on a timely basis, Jaguar may be required to delay, limit, reduce or terminate one or more of its product development programs or future commercialization efforts.

Jaguar is substantially dependent on the success of Equilevia, Canalevia and Neonorm and cannot be certain that Equilevia or Canalevia will be approved or that Jaguar can successfully commercialize these products.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Jaguar currently does not have regulatory approval for any of its prescription drug product candidates, including Equilevia and Canalevia. Jaguar's current efforts are primarily focused on the commercial launch of Neonorm Calf and Neonorm Foal in the United States, and development efforts

Table of Contents

related to Equilevia and Canalevia. Jaguar is focused on expanding Canalevia's proposed indications to cover acute diarrhea in dogs and full FDA approval for CID for dogs. Accordingly, Jaguar's near-term prospects, including its ability to generate material product revenue, obtain any new financing if needed to fund its business and operations or enter into potential strategic transactions, will depend heavily on the success of Neonorm and, if approved, Equilevia and Canalevia.

Substantial time and capital resources have been previously devoted by third parties in the development of crofelemer, the active pharmaceutical ingredient, or API, in Canalevia, and the botanical extract used in Neonorm. Both crofelemer and the botanical extract used in Neonorm were originally developed at Shaman Pharmaceuticals, Inc., or Shaman, by certain members of Jaguar's management team, including Lisa A. Conte, Jaguar's Chief Executive Officer and President, and Steven R. King, Ph.D., Jaguar's Executive Vice President, Sustainable Supply, Ethnobotanical Research and Intellectual Property and Secretary. Shaman spent significant development resources before voluntarily filing for bankruptcy in 2001 pursuant to Chapter 11 of the U.S. Bankruptcy Code. The rights to crofelemer and the botanical extract used in Neonorm, as well as other intellectual property rights, were subsequently acquired by Napo from Shaman in 2001 pursuant to a court approved sale of assets. Ms. Conte founded Napo in 2001 and is the current interim chief executive officer of Napo and a member of its board of directors. While at Napo, certain members of Jaguar's management team, including Ms. Conte and Dr. King, continued the development of crofelemer. In 2005, Napo entered into license agreements with Glenmark Pharmaceuticals Ltd., or Glenmark, and Luye Pharma Group Limited for rights to various human indications of crofelemer in certain territories as defined in the respective license agreements with these licensees. Subsequently, after expending significant sums developing crofelemer, including trial design and on-going patient enrollment in the final pivotal Phase 3 trial for crofelemer for non-infectious diarrhea in adults with HIV/AIDS on antiretroviral therapy, in late 2008, Napo entered into a collaboration agreement with Salix Pharmaceuticals, Inc., or Salix, for development and commercialization rights to certain indications worldwide and certain rights in North America, Europe, and Japan, to crofelemer for human use. In January 2014, Jaguar entered into the Napo License Agreement pursuant to which Jaguar acquired an exclusive worldwide license to Napo's intellectual property rights and technology, including crofelemer and the botanical extract used in Neonorm, for all veterinary treatment uses and indications for all species of animals. In February 2014, most of the executive officers of Napo, and substantially all Napo's employees, became Jaguar's employees. If Jaguar is not successful in the development and commercialization of Neonorm and Canalevia, Jaguar's business and its prospects will be harmed.

The successful development and commercialization of Neonorm and, if approved, Equilevia and Canalevia will depend on a number of factors, including the following:

the successful completion of the pivotal trials and toxicology studies for Equilevia and Canalevia, which may take significantly longer than Jaguar currently anticipates and will depend, in part, upon the satisfactory performance of third-party contractors;

Jaguar's ability to demonstrate to the satisfaction of the FDA and any other regulatory bodies, the safety and efficacy of Equilevia and Canalevia;

Jaguar's ability and that of its contract manufacturers to manufacture supplies of Neonorm, Equilevia and Canalevia and to develop, validate and maintain viable commercial manufacturing processes that are compliant with current good manufacturing practices, or cGMP, if required;

the success of Neonorm field studies and acceptance of their results by dairy producers;

Jaguar's ability to successfully launch Neonorm, whether alone or in collaboration with others;

Jaguar's ability to successfully launch Equilevia and Canalevia assuming approval is obtained, whether alone or in collaboration with others;

Table of Contents

the availability, perceived advantages, relative cost, relative safety and relative efficacy of Jaguar's prescription drug product candidates and non-prescription products compared to alternative and competing treatments;

the acceptance of Jaguar's prescription drug product candidates and non-prescription products as safe and effective by veterinarians, animal owners and the animal health community;

Jaguar's ability to achieve and maintain compliance with all regulatory requirements applicable to its business; and

Jaguar's ability to obtain and enforce its intellectual property rights and obtain marketing exclusivity for its prescription drug product candidates and non-prescription products, and avoid or prevail in any third-party patent interference, patent infringement claims or administrative patent proceedings initiated by third parties or the U.S. Patent and Trademark Office, or USPTO.

Many of these factors are beyond Jaguar's control. Accordingly, Jaguar may not be successful in developing or commercializing Neonorm, Equilevia, Canalevia or any of its other potential products. If Jaguar is unsuccessful or are significantly delayed in developing and commercializing Neonorm, Equilevia, Canalevia or any of its other potential products, its business and prospects will be harmed and you may lose all or a portion of the value of your investment in Jaguar common stock.

If Jaguar is not successful in identifying, licensing, developing and commercializing additional product candidates and products, Jaguar's ability to expand its business and achieve its strategic objectives could be impaired.

Although a substantial amount of Jaguar's efforts are focused on the commercial launch of Neonorm and the continued development and potential approvals of Equilevia and Canalevia, a key element of Jaguar's strategy is to identify, develop and commercialize a portfolio of products to serve the animal health market. Most of Jaguar's potential products are based on Jaguar's knowledge of medicinal plants. Jaguar's current focus is primarily on product candidates and products for animals whose active pharmaceutical ingredient or botanical extract has been successfully commercialized or demonstrated to be safe and effective in human trials. In some instances, Jaguar may be unable to further develop these potential products because of perceived regulatory and commercial risks. Even if Jaguar successfully identifies potential products, Jaguar may still fail to yield products for development and commercialization for many reasons, including the following:

competitors may develop alternatives that render Jaguar's potential products obsolete;

potential products Jaguar seeks to develop may be covered by third-party patents or other exclusive rights;

a potential product may on further study be shown to have harmful side effects in animals or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria;

a potential product may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and

a potential product may not be accepted as safe and effective by veterinarians, animal owners, key opinion leaders and other decision-makers in the animal health market.

Table of Contents

While Jaguar is developing species-specific formulations, including flavors, methods of administration, new patents and other strategies with respect to Jaguar's current potential products, Jaguar may be unable to prevent competitors from developing substantially similar products and bringing those products to market earlier than Jaguar can. If such competing products achieve regulatory approval and commercialization prior to Jaguar's potential products, Jaguar's competitive position may be impaired. If Jaguar fails to develop and successfully commercialize other potential products, its business and future prospects may be harmed and Jaguar will be more vulnerable to any problems that it encounters in developing and commercializing its current potential products.

The Elanco Agreement is important to Jaguar's business. If Jaguar or Elanco fail to adequately perform under the Elanco Agreement, or if Jaguar or Elanco terminate the Elanco Agreement, the development and commercialization of Canalevia and any other Licensed Products would be delayed or terminated and Jaguar's business would be adversely affected.

The Elanco Agreement is important to Jaguar's business, and its ability to develop and commercialize Canalevia and any other License Product is dependent upon this agreement.

The Elanco Agreement may be terminated by Elanco on a voluntary basis upon completion of the dose ranging study or at any time upon 90 days' written notice to Jaguar or for Jaguar's failure to complete certain a quality assessment with respect to a certain facility within 6 months of the effective date of the Elanco Agreement. The Elanco Agreement may also be terminated by either party:

for the other party's material breach, where such breach is not cured within the timeframe specified by the agreement;

upon the bankruptcy, insolvency or dissolution of the other party; or

for certain activities involving the challenge of certain patents licensed by us to Elanco.

Upon Elanco's voluntary termination or termination for Elanco's breach, among other things, all licenses and rights granted to Elanco will terminate and revert to Jaguar, and Elanco has agreed to assign to Jaguar all registrations and trademarks obtained in connection with the products covered by the agreement. Upon expiration of the term of the Elanco Agreement or termination for Jaguar's breach, among other things, Jaguar has agreed to assign to Elanco all registrations and trademarks obtained in connection with the products covered by the agreement.

Termination of the Elanco Agreement could cause significant delays in Jaguar's product development and commercialization efforts that could prevent Jaguar from commercializing its Licensed Products, including Canalevia, without first expanding its internal capabilities, securing additional financing or entering into another agreement with a third party. Any alternative collaboration or license could also be on less favorable terms to Jaguar.

Under the Elanco Agreement, among other things, Jaguar is responsible for the manufacture and supply of all of Elanco's reasonable requirements of the products covered by the agreement. If Jaguar is unable to meet its manufacture and supply obligations, Elanco may claim that Jaguar has materially breached the Elanco Agreement and terminate such agreement, which could adversely affect Jaguar's business and its ability to successfully develop and commercialize any products covered by the agreement, including Canalevia.

Under the Elanco Agreement, Elanco has agreed to provide funding for certain clinical development activities. If the Elanco Agreement were terminated, Jaguar may need to seek additional financing to support the research and development of any terminated products or discontinue any terminated products, which could adversely affect Jaguar's business. In addition, Elanco is solely responsible for commercializing products outside the United States. Jaguar cannot directly control Elanco's commercialization activities or the resources it allocates to Jaguar's product candidates.

Table of Contents

Jaguar's interests and Elanco's interests may differ or conflict from time to time, or Jaguar may disagree with Elanco's level of effort or resource allocation. Elanco may internally prioritize Jaguar's product candidates differently than Jaguar does or it may not allocate sufficient resources to effectively or optimally commercialize them. If these events were to occur, Jaguar's business would be adversely affected.

Jaguar's animal health products faces significant competition from other pharmaceutical companies and Jaguar's operating results will suffer if Jaguar fails to compete effectively.

The development and commercialization of animal health products is highly competitive and Jaguar's success depends on its ability to compete effectively with other products in the market. Jaguar expects to compete with the animal health divisions of major pharmaceutical and biotechnology companies such as Merck Animal Health, Merial Inc., Elanco Animal Health, Bayer Animal Health GmbH, Novartis Animal Health Inc. and Boehringer Ingelheim Animal Health, as well as specialty animal health medicines companies such as Zoetis Inc., Phibro Animal Health Corporation and, in Europe, Virbac S.A., Vétquinol S.A., Ceva Animal Health S.A. and Dechra Pharmaceuticals PLC. Jaguar is also aware of several early-stage companies that are developing products for use in the animal health market, including Aratana Therapeutics, Inc., Kindred Biosciences, Inc., Parnell Pharmaceuticals Holdings Ltd, Nexvet Biopharma and ImmuCell Corporation. Jaguar also competes with academic institutions, governmental agencies and private organizations that are conducting research in the field of animal health products.

Although there are currently no FDA-approved anti-secretory products to treat acute diarrhea in dogs, Jaguar anticipates that Canalevia, if approved, will face competition from various products, including products approved for use in humans that are used extra-label in animals. Extra-label use is the use of an approved drug outside of its cleared or approved indications in the animal context. All of Jaguar's potential products could also face competition from new products in development. These and other potential competing products may benefit from greater brand recognition and brand loyalty than Jaguar's products and product candidates may achieve.

Many of Jaguar's competitors and potential competitors have substantially more financial, technical and human resources than Jaguar does. Many also have more experience in the development, manufacture, regulation and worldwide commercialization of animal health products, including animal prescription drugs and non-prescription products.

For these reasons, Jaguar cannot be certain that it and its products can compete effectively.

Jaguar may be unable to obtain, or obtain on a timely basis, regulatory approval for its existing or future prescription drug product candidates under applicable regulatory requirements, which would harm its operating results.

The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of animal health products are subject to extensive regulation. Jaguar is usually not permitted to market its prescription drug product candidates in the United States until it receives approval of an NADA from the FDA. To gain approval to market an animal prescription drug for a particular species, Jaguar must provide the FDA with safety and efficacy data from pivotal trials that adequately demonstrate that Jaguar's prescription drug product candidates are safe and effective in the target species (*e.g.* dogs, cats or horses) for the intended indications. In addition, Jaguar must provide manufacturing data evidencing that it can produce its product candidates in accordance with cGMP. For the FDA, Jaguar must also provide data from toxicology studies, also called target animal safety studies, and in some cases environmental impact data. In addition to Jaguar's internal activities, Jaguar will partially rely on contract research organizations, or CROs, and other third parties to conduct its toxicology studies and for certain other development activities. The results of toxicology studies and other initial development

Table of Contents

activities, and of any previous studies in humans or animals conducted by Jaguar or third parties, may not be predictive of future results of pivotal trials or other future studies, and failure can occur at any time during the conduct of pivotal trials and other development activities by Jaguar or its CROs. Jaguar's pivotal trials may fail to show the desired safety or efficacy of its prescription drug product candidates despite promising initial data or the results in previous human or animal studies conducted by others, and success of a prescription drug product candidate in prior animal studies, or in the treatment of humans, does not ensure success in subsequent studies. Clinical trials in humans and pivotal trials in animals sometimes fail to show a benefit even for drugs that are effective because of statistical limitations in the design of the trials or other statistical anomalies. Therefore, even if Jaguar's studies and other development activities are completed as planned, the results may not be sufficient to obtain a required regulatory approval for a product candidate.

Regulatory authorities can delay, limit or deny approval of any of Jaguar's prescription drug product candidates for many reasons, including:

if they disagree with Jaguar's interpretation of data from its pivotal studies or other development efforts;

if Jaguar is unable to demonstrate to their satisfaction that Jaguar's product candidate is safe and effective for the target indication and in the target species;

if they require additional studies or change their approval policies or regulations;

if they do not approve of the formulation, labeling or the specifications of Jaguar's current and future product candidates; and

if they fail to approve the manufacturing processes of Jaguar's third-party contract manufacturers.

Further, even if Jaguar receives a required approval, such approval may be for a more limited indication than Jaguar originally requested, and the regulatory authority may not approve the labeling that Jaguar believes is necessary or desirable for successful commercialization.

Any delay or failure in obtaining any necessary regulatory approval for the intended indications of Jaguar's product candidates would delay or prevent commercialization of such product candidates and would harm Jaguar's business and Jaguar's operating results.

The results of Jaguar's earlier studies of Neonorm may not be predictive of the results in any future species-specific formulation studies, and Jaguar may not be successful in its efforts to develop or commercialize line extensions of Neonorm.

Jaguar's product pipeline includes a number of species-specific formulations of Neonorm, Jaguar's lead non-prescription product. The results of Jaguar's dairy calf studies and other initial development activities and of any previous studies in humans or animals conducted by Jaguar or third parties may not be predictive of future results of these formulation studies. Failure can occur at any time during the conduct of these trials and other development activities. Even if Jaguar's species-specific formulation studies and other development activities are completed as planned, the results may not be sufficient to pursue a particular line extension for Neonorm. Further, even if Jaguar obtains promising results from its species-specific formulation studies, Jaguar may not successfully commercialize any line extension. Because line extensions are developed for a particular species market, Jaguar may not be able to leverage its experience from the commercial launch of Neonorm Calf and Neonorm Foal in new animal species markets. If Jaguar is not successful in developing and successfully commercializing these line extension products, Jaguar may not be able to grow its revenue and its business may be harmed.

Table of Contents

Development of prescription drug products is inherently expensive, time-consuming and uncertain, and any delay or discontinuance of Jaguar's current or future pivotal trials would harm Jaguar's business and prospects.

Development of prescription drug products for animals remains an inherently lengthy, expensive and uncertain process, and Jaguar's development activities may not be successful. Jaguar does not know whether its current or planned pivotal trials for any of its product candidates will begin or conclude on time, and they may be delayed or discontinued for a variety of reasons, including if Jaguar is unable to:

address any safety concerns that arise during the course of the studies;

complete the studies due to deviations from the study protocols or the occurrence of adverse events;

add new study sites;

address any conflicts with new or existing laws or regulations; or

reach agreement on acceptable terms with study sites, which can be subject to extensive negotiation and may vary significantly among different sites.

Further, Jaguar may not be successful in developing species-specific formulations for Neonorm, and Neonorm may be subject to the same regulatory regime as prescription drug products in jurisdictions outside the United States. Any delays in completing Jaguar's development efforts will increase its costs, delay its development efforts and approval process and jeopardize its ability to commence product sales and generate revenue. Any of these occurrences may harm Jaguar's business, financial condition and prospects. In addition, factors that may cause a delay in the commencement or completion of Jaguar's development efforts may also ultimately lead to the denial of regulatory approval of Jaguar's product candidates which, as described above, would harm Jaguar's business and prospects.

Jaguar will partially rely on third parties to conduct its development activities. If these third parties do not successfully carry out their contractual duties, Jaguar may be unable to obtain regulatory approvals or commercialize its current or future product candidates on a timely basis, or at all.

Jaguar will partially rely upon CROs to conduct its toxicology studies and for other development activities. Jaguar intends to rely on CROs to conduct one or more of its planned pivotal trials. These CROs are not Jaguar's employees, and except for contractual duties and obligations, Jaguar has limited ability to control the amount or timing of resources that they devote to Jaguar's programs or manage the risks associated with their activities on Jaguar's behalf. Jaguar is responsible for ensuring that each of its studies is conducted in accordance with the development plans and trial protocols presented to regulatory authorities. Any deviations by Jaguar's CROs may adversely affect its ability to obtain regulatory approvals, subject Jaguar to penalties or harm Jaguar's credibility with regulators. The FDA and foreign regulatory authorities also require Jaguar and its CROs to comply with regulations and standards, commonly referred to as good clinical practices, or GCPs, or good laboratory practices, or GLPs, for conducting, monitoring, recording and reporting the results of Jaguar's studies to ensure that the data and results are scientifically valid and accurate.

Agreements with CROs generally allow the CROs to terminate in certain circumstances with little or no advance notice. These agreements generally will require Jaguar's CROs to reasonably cooperate with Jaguar at Jaguar's expense for an orderly winding down of the CROs' services under the agreements. If the CROs conducting Jaguar's studies do not comply with their contractual duties or obligations, or if they experience work stoppages, do not meet expected deadlines, or if the quality or accuracy of the data they obtain is compromised, Jaguar may need to secure new arrangements with alternative CROs, which could be difficult and costly. In such event, Jaguar's studies also may need to

Table of Contents

be extended, delayed or terminated as a result, or may need to be repeated. If any of the foregoing were to occur, regulatory approval, if required, and commercialization of Jaguar's product candidates may be delayed and Jaguar may be required to expend substantial additional resources.

Even if Jaguar obtains regulatory approval for Equilevia, Canalevia or its other product candidates, they may never achieve market acceptance. Further, even if Jaguar is successful in commercially launching Neonorm, it may not achieve commercial success.

If Jaguar obtain necessary regulatory approvals for Equilevia, Canalevia or its other product candidates, such products may still not achieve market acceptance and may not be commercially successful. Market acceptance of Canalevia, Equilevia, Neonorm and any of Jaguar's other products depends on a number of factors, including:

the safety of Jaguar's products as demonstrated in its target animal studies;

the indications for which Jaguar products are approved or marketed;

the potential and perceived advantages over alternative treatments or products, including generic medicines and competing products currently prescribed by veterinarians, and products approved for use in humans that are used extra-label in animals;

the acceptance by veterinarians, companion animal owners and production animal owners, including in the dairy industry, of Jaguar's products as safe and effective;

the cost in relation to alternative treatments and willingness on the part of veterinarians and animal owners to pay for Jaguar's products;

the prevalence and severity of any adverse side effects of Jaguar's products;

the relative convenience and ease of administration of Jaguar's products; and

the effectiveness of Jaguar's sales, marketing and distribution efforts.

Any failure by Canalevia, Equilevia, Neonorm or any of Jaguar's other products to achieve market acceptance or commercial success would harm Jaguar's financial condition and results of operations.

The dairy industry is subject to conditions beyond Jaguar's control and the occurrence of any such conditions may harm Jaguar's business and impact the demand for its products.

The demand for production animal health products, such as Neonorm Calf, is heavily dependent on factors that affect the dairy market that are beyond Jaguar's control, including the following, any of which may harm Jaguar's business:

cost containment measures within the dairy industry, in response to international, national and local general economic conditions, which may affect the market adoption of Jaguar's products;

state and federal government policies, including government-funded programs or subsidies whose discontinuance or modification could erode the demand for Jaguar's products;

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

a decline in demand for dairy products due to changes in consumer diets away from dairy products, which could adversely affect the demand for production animal health products;

adverse weather conditions and natural disasters, such as floods, droughts, and pestilence, which can lower dairy yields; and

disease or other conditions beyond Jaguar's control.

Table of Contents

Animal products, like human products, are subject to unanticipated post-approval safety or efficacy concerns, which may harm Jaguar's business and reputation.

The success of Jaguar's commercialization efforts will depend upon the perceived safety and effectiveness of animal health products, in general, and of Jaguar's products, in particular. Unanticipated safety or efficacy concerns can subsequently arise with respect to approved prescription drug products, or non-prescription products, such as Neonorm, which may result in product recalls or withdrawals or suspension of sales, as well as product liability and other claims. Any safety or efficacy concerns, or recalls, withdrawals or suspensions of sales of Jaguar's products, or human products derived from *Croton lechleri*, if any, could harm Jaguar's reputation and business, regardless of whether such concerns or actions are justified.

Future federal and state legislation may result in increased exposure to product liability claims, which could result in substantial losses.

Under current federal and state laws, companion and production animals are generally considered to be the personal property of their owners and, as such, the owners' recovery for product liability claims involving their companion and production animals may be limited to the replacement value of the animal. Companion animal owners and their advocates, however, have filed lawsuits from time to time seeking non-economic damages such as pain and suffering and emotional distress for harm to their companion animals based on theories applicable to personal injuries to humans. If new legislation is passed to allow recovery for such non-economic damages, or if precedents are set allowing for such recovery, Jaguar could be exposed to increased product liability claims that could result in substantial losses to Jaguar if successful. In addition, some horses can be worth millions of dollars or more, and product liability for horses may be very high. While Jaguar currently has product liability insurance, such insurance may not be sufficient to cover any future product liability claims against Jaguar.

If Jaguar fails to retain current members of its senior management, or to identify, attract, integrate and retain additional key personnel, its business will be harmed.

Jaguar's success depends on its continued ability to attract, retain and motivate highly qualified management and scientific personnel. Jaguar is highly dependent upon its senior management, particularly Lisa A. Conte, Jaguar's president and Chief Executive Officer. The loss of services of any of Jaguar's key personnel would cause a disruption in Jaguar's ability to develop its current or future product pipeline and commercialize its products and product candidates. Although Jaguar has offer letters with these key members of senior management, such agreements do not prohibit them from resigning at any time. For example, the resignation of Jaguar's former Chief Financial Officer, Charles O. Thompson, in September 2014, and the mutually agreed departure of Jaguar's former Chief Veterinary Officer, Serge Martinod, D.V.M., Ph.D. in February 2015, caused Jaguar to incur additional expenses and expend resources to ensure a smooth transition with their respective successors, which diverted management attention away from executing Jaguar's operational plan during this period. Jaguar currently does not maintain "key man" life insurance on any of its senior management team. The loss of Ms. Conte or other members of Jaguar's current senior management could adversely affect the timing or outcomes of Jaguar's current and planned studies, as well as the prospects for commercializing Jaguar's products.

In addition, competition for qualified personnel in the animal health field is intense, because there are a limited number of individuals who are trained or experienced in the field. Further, Jaguar's headquarters are located in San Francisco, California, and the dairy and agriculture industries are not prevalent in urban areas such as San Francisco. Jaguar will need to hire additional personnel as it expands its product development and commercialization activities. Even if Jaguar is successful in hiring qualified individuals, as Jaguar is a growing organization, Jaguar does not have a track record for

Table of Contents

integrating and retaining individuals. If Jaguar is not successful in identifying, attracting, integrating or retaining qualified personnel on acceptable terms, or at all, its business will be harmed.

Jaguar is dependent on two suppliers for the raw material used to produce the active pharmaceutical ingredient in Canalevia and the botanical extract in Neonorm. The termination of either of these contracts would result in a disruption to product development and Jaguar's business will be harmed.

The raw material used to manufacture Canalevia and Neonorm is crude plant latex, or CPL, derived from the *Croton lechleri* tree, which is found in countries in South America, principally Peru. The ability of Jaguar's contract suppliers to harvest CPL is governed by the terms of their respective agreements with local government authorities. Although CPL is available from multiple suppliers, Jaguar only has contracts with two suppliers to obtain CPL and arrange the shipment to Jaguar's contract manufacturer. Accordingly, if Jaguar's contract suppliers do not or are unable to comply with the terms of Jaguar's respective agreements, and Jaguar is not able to negotiate new agreements with alternate suppliers on terms that Jaguar deems commercially reasonable, it may harm Jaguar's business and prospects. The countries from which Jaguar obtains CPL could change their laws and regulations regarding the export of the natural products or impose or increase taxes or duties payable by exporters of such products. Restrictions could be imposed on the harvesting of the natural products or additional requirements could be implemented for the replanting and regeneration of the raw material. Such events could have a significant impact on Jaguar's cost and ability to produce Canalevia, Neonorm and anticipated line extensions.

Jaguar is dependent upon third-party contract manufacturers, both for the supply of the active pharmaceutical ingredient in Canalevia and the botanical extract in Neonorm, as well as for the supply of finished products for commercialization.

To date, the CPL, API, botanical extract and some finished products that Jaguar has used in its studies and trials were obtained from Napo. Jaguar has also contracted with third parties for the formulation of API and botanical extract into finished products for Jaguar's studies. Jaguar has entered into memorandums of understanding with Indena S.p.A. for the manufacture of CPL received from Jaguar's suppliers into the API in Canalevia to support Jaguar's regulatory filings, as well as the botanical extract in Neonorm and agreed to negotiate a commercial supply agreement. Indena S.p.A. has never manufactured either such ingredient to commercial scale. As a second supplier situation, Jaguar has entered into a four-year manufacturing and supply agreement with Glenmark for the supply of the API in Canalevia. Glenmark is the current manufacturer of crofelemer, the active API in Canalevia, for the FDA-approved human anti-secretory product, and the manufacturer on file for the NADA to which Jaguar has a right of reference. Jaguar has contracted with a third-party manufacturer for formulation development and manufacturing, whereby the manufacturer will provide enteric-coated tablets to us for use in animals. Jaguar also may contract with additional third parties for the formulation and supply of finished products, which Jaguar will use in its planned studies and commercialization efforts.

Jaguar will be dependent upon its contract manufacturers for the supply of the API in Canalevia. Jaguar currently has sufficient quantities of the botanical extract used in Neonorm to support initial commercialization of Neonorm. However, Jaguar will require additional quantities of the botanical extract if Jaguar's commercial launch of Neonorm is successful. If Jaguar is not successful in reaching agreements with third parties on terms that Jaguar considers commercially reasonable for manufacturing and formulation, or if Jaguar's contract manufacturer and formulator are not able to produce sufficient quantities or quality of API, botanical extract or finished product under their agreements, it could delay Jaguar's plans and harm its business prospects.

The facilities used by Jaguar's third-party contractors are subject to inspections, including by the FDA, and other regulators, as applicable. Jaguar also depends on its third-party contractors to comply

Table of Contents

with cGMP. If Jaguar's third-party contractors do not maintain compliance with these strict regulatory requirements, Jaguar and they will not be able to secure or maintain regulatory approval for their facilities, which would have an adverse effect on Jaguar's operations. In addition, in some cases, Jaguar also is dependent on its third-party contractors to produce supplies in conformity to its specifications and maintain quality control and quality assurance practices and not to employ disqualified personnel. If the FDA or a comparable foreign regulatory authority does not approve the facilities of Jaguar's third-party contractors if so required, or if it withdraws any such approval in the future, Jaguar may need to find alternative manufacturing or formulation facilities, which could result in delays in Jaguar's ability to develop or commercialize its products, if at all. Jaguar and its third-party contractors also may be subject to penalties and sanctions from the FDA and other regulatory authorities for any violations of applicable regulatory requirements. The USDA and the European Medicines Agency, or the EMA, employ different regulatory standards than the FDA, so Jaguar may require multiple manufacturing processes and facilities for the same product candidate or any approved product. Jaguar is also exposed to risk if its third-party contractors do not comply with the negotiated terms of Jaguar's agreements, or if they suffer damage or destruction to their facilities or equipment.

If Jaguar is unable to establish sales capabilities on its own or through third parties, Jaguar may not be able to market and sell its current or future products and product candidates, if approved, and generate product or other revenue.

Jaguar currently has limited sales, marketing or distribution capabilities, and prior to its launch of Neonorm for preweaned dairy calves, had no experience in the sale, marketing and distribution of animal health products. There are significant risks involved in building and managing a sales organization, including Jaguar's potential inability to attract, hire, retain and motivate qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel and effectively oversee a geographically-dispersed sales and marketing team. Any failure or delay in the development of Jaguar's internal sales, marketing and distribution capabilities and entry into adequate arrangements with distributors or other partners would adversely impact the commercialization of Neonorm, Equilevia and Canalevia, if approved. If Jaguar is not successful in commercializing Neonorm, Equilevia, Canalevia or any of its other line extension products, either on its own or through one or more distributors, or in generating upfront licensing or other fees, Jaguar may never generate significant revenue and may continue to incur significant losses, which would harm Jaguar's financial condition and results of operations.

Changes in distribution channels for animal prescription drugs may make it more difficult or expensive to distribute Jaguar's prescription drug products.

In the United States, animal owners typically purchase their animal prescription drugs from their local veterinarians who also prescribe such drugs. There is a trend, however, toward increased purchases of animal prescription drugs from Internet-based retailers, "big-box" retail stores and other over-the-counter distribution channels, which follows an emerging shift in recent years away from the traditional veterinarian distribution channel. It is also possible that animal owners may come to rely increasingly on Internet-based animal health information rather than on their veterinarians. Jaguar currently expects to market its animal prescription drugs directly to veterinarians, so any reduced reliance on veterinarians by animal owners could harm Jaguar's business and prospects by making it more difficult or expensive for Jaguar to distribute its prescription drug products. Animal owners also may substitute human health products for animal prescription drugs if the human health products are less expensive or more readily available, which could also harm Jaguar's business.

Legislation has been or may be proposed in various states that would require veterinarians to provide animal owners with written prescriptions and disclosures that the animal owner has the right to fill the prescriptions through other means. If enacted, such legislation could lead to a reduction in the

Table of Contents

number of animal owners who purchase their animal pharmaceuticals directly from veterinarians, which also could harm Jaguar's business.

Consolidation of Jaguar's customers could negatively affect the pricing of Jaguar's products.

Veterinarians will be Jaguar's primary customers for its prescription drug products, as well as, to some extent, its non-prescription products, such as Neonorm. In recent years, there has been a trend towards the consolidation of veterinary clinics and animal hospitals. If this trend continues, these large clinics and hospitals could attempt to leverage their buying power to obtain favorable pricing from Jaguar and other animal health product companies. Any downward pressure on the prices of any of Jaguar's products could harm Jaguar's operating results and financial condition.

Jaguar will need to increase the size of its organization and may not successfully manage such growth.

As of December 31, 2016, Jaguar had 23 employees. Jaguar's ability to manage its growth effectively will require Jaguar to hire, train, retain, manage and motivate additional employees and to implement and improve Jaguar's operational, financial and management systems. These demands also may require the hiring of additional senior management personnel or the development of additional expertise by Jaguar's senior management personnel. If Jaguar fails to expand and enhance its operational, financial and management systems in conjunction with its potential future growth, it could harm Jaguar's business and operating results.

Jaguar's research and development relies on evaluations in animals, which is controversial and may become subject to bans or additional regulations.

The evaluation of Jaguar's products and product candidates in target animals is required to develop, formulate and commercialize Jaguar's products and product candidates. Although Jaguar's animal testing will be subject to GLPs and GCPs, as applicable, animal testing in the human pharmaceutical industry and in other industries continues to be the subject of controversy and adverse publicity. Some organizations and individuals have sought to ban animal testing or encourage the adoption of additional regulations applicable to animal testing. To the extent that such bans or regulations are imposed, Jaguar's research and development activities, and by extension Jaguar's operating results and financial condition, could be harmed. In addition, negative publicity about animal practices by Jaguar or in its industry could harm Jaguar's reputation among potential customers.

If approved, Jaguar's prescription drug product candidates may be marketed in the United States only in the target animals and for the indications for which they are approved, and if Jaguar wants to expand the approved animals or indications, it will need to obtain additional approvals, which may not be granted.

If Jaguar's prescription drug product candidates are approved by regulatory authorities, Jaguar may market or advertise them only in the specific species and for treatment of the specific indications for which they were approved, which could limit use of the products by veterinarians and animal owners. Jaguar intends to develop, promote and commercialize approved products for other animals and new treatment indications in the future, but Jaguar cannot be certain whether or at what additional time and expense Jaguar will be able to do so. If Jaguar does not obtain marketing approvals for other species or for new indications, Jaguar's ability to expand its business may be harmed.

Under the Animal Medicinal Drug Use Clarification Act of 1994, veterinarians are permitted to prescribe extra-label uses of certain approved animal drugs and approved human drugs for animals under certain conditions. While veterinarians may in the future prescribe and use human-approved products or Jaguar's products for extra-label uses, Jaguar may not promote its products for extra-label uses. If the FDA determines that any of Jaguar's marketing activities constitute promotion of an extra-label use, Jaguar could be subject to regulatory enforcement, including seizure of any misbranded or

Table of Contents

mislabeled drugs, and civil or criminal penalties, any of which could have an adverse impact on Jaguar's reputation and expose Jaguar to potential liability. Jaguar will continue to spend resources ensuring that its promotional claims for its products and product candidates remain compliant with applicable FDA laws and regulations, including materials Jaguar posts or links to on its website. For example, in 2012, Jaguar's Chief Executive Officer received an "untitled letter" from the FDA while at Napo regarding preapproval promotion statements constituting misbranding of crofelemer, which was then an investigational drug. These statements were included in archived press releases included on Napo's website. Napo was required to expend time and resources to revise its website to remove the links in order to address the concerns raised in the FDA's letter.

If Jaguar's prescription drug product candidates are approved by regulatory authorities, the misuse or extra-label use of such products may harm Jaguar's reputation or result in financial or other damages.

If Jaguar's prescription drug product candidates are approved by regulatory authorities, there may be increased risk of product liability if veterinarians, animal owners or others attempt to use such products extra-label, including the use of Jaguar's products in species (including humans) for which they have not been approved. Furthermore, the use of an approved drug for indications other than those indications for which such products have been approved may not be effective, which could harm Jaguar's reputation and lead to an increased risk of litigation. If Jaguar is deemed by a governmental or regulatory agency to have engaged in the promotion of any approved product for extra-label use, such agency could request that Jaguar modify its training or promotional materials and practices and Jaguar could be subject to significant fines and penalties, and the imposition of these sanctions could also affect Jaguar's reputation and position within the industry. Any of these events could harm Jaguar's reputation and its operating results.

Jaguar may not maintain the benefits associated with MUMS designation, including market exclusivity.

Although Jaguar has received MUMS designation for Canalevia for the treatment of CID in dogs, Jaguar may not maintain the benefits associated with MUMS designation. MUMS designation is a status similar to "orphan drug" status for human drugs. When Jaguar is granted MUMS designation, Jaguar is eligible for incentives to support the approval or conditional approval of the designated use. This designation does not allow Jaguar to commercialize a product until such time as Jaguar obtains approval or conditional approval of the product.

Because Canalevia has received MUMS designation for the identified particular intended use, Jaguar is eligible to obtain seven years of exclusive marketing rights upon approval (or conditional approval) of Canalevia for that intended use and become eligible for grants to defray the cost of Jaguar's clinical work. Each designation that is granted must be unique, *i.e.*, only one designation can be granted for a particular API in a particular dosage form for a particular intended use. The intended use includes both the target species and the disease or condition to be treated.

At some point, Jaguar could lose MUMS designation. The basis for a lost designation can include but is not limited to, Jaguar's failure to engage with due diligence in moving forward with a non-conditional approval, or a competing product has received conditional approval or approval prior to Jaguar's product candidate for the same indication or species. In addition, MUMS designation may be withdrawn for a variety of reasons such as where the FDA determines that the request for designation was materially defective, or if the manufacturer is unable to assure sufficient quantity of the prescription drug product to meet the needs of animals with the rare disease or condition. If this designation is lost, it could have a negative impact on the product and Jaguar, which includes but is not limited to, market exclusivity related to MUMS designation, or eligibility for grants as a result of MUMS designation.

Table of Contents

The market for Jaguar's products, and the animal health market as a whole, is uncertain and may be smaller than Jaguar anticipates, which could lead to lower revenue and harm Jaguar's operating results.

It is very difficult to estimate the commercial potential of any of Jaguar's products because of the emerging nature of Jaguar's industry as a whole. The animal health market continues to evolve and it is difficult to predict the market potential for Jaguar's products. The market will depend on important factors such as safety and efficacy compared to other available treatments, changing standards of care, preferences of veterinarians, the willingness of companion and production animal owners to pay for such products, and the availability of competitive alternatives that may emerge either during the product development process or after commercial introduction. If the market potential for Jaguar's products is less than Jaguar anticipates due to one or more of these factors, it could negatively impact Jaguar's business, financial condition and results of operations. Further, the willingness of companion and production animal owners to pay for Jaguar's products may be less than Jaguar anticipates, and may be negatively affected by overall economic conditions. The current penetration of animal insurance in the United States is low, animal owners are likely to have to pay out-of-pocket, and such owners may not be willing or able to pay for Jaguar's products.

Jaguar's largest stockholder, Napo, controls a significant percentage of Jaguar common stock, and its interests may conflict with those of Jaguar's other stockholders.

As of January 31, 2017, Napo owned in the aggregate approximately 19% of Jaguar common stock. This concentration of ownership gives Napo significant influence over the way Jaguar is managed and the direction of Jaguar's business. In addition, because Jaguar and Napo are party to a license agreement, Napo's interests as the licensor of Jaguar's technology may be different from Jaguar's or those of Jaguar's other stockholders. As a result, the interests of Napo with respect to matters potentially or actually involving or affecting Jaguar, such as future acquisitions, licenses, financings and other corporate opportunities and attempts to acquire Jaguar, may conflict with the interests of Jaguar's other stockholders.

Further, Napo has entered into settlement agreements with certain of its existing creditors, which, among other things, require Jaguar, at the closing of the merger, to issue in the aggregate approximately 43,156,649 shares of Jaguar non-voting common stock and 2,005,245 shares of Jaguar common stock in full satisfaction of all existing indebtedness then owed by Napo to such creditors. Shares of Jaguar non-voting common stock are the same in all respects to shares of Jaguar's common stock except that holders of shares of non-voting common stock are not entitled to vote on matters submitted to Jaguar stockholders (other than in connection with a change of control of Jaguar), and shares of non-voting common stock are convertible into shares of common stock on a one-for-one basis (x) upon transfers to non-affiliates of Nantucket, (y) upon the release from escrow of certain non-voting shares held by Nantucket to the legacy stockholders of Napo under specified conditions and (z) at any time on or after April 1, 2018 at the option of the respective holders thereof. Napo has also issued to certain investors debt securities that are exchangeable or convertible for shares of Jaguar common stock. As a result, upon the consummation of the merger and related debt settlements, Napo's former creditors and certain investors of Napo debt securities (following conversion or exchange of such securities in accordance with their respective terms) will have significant influence over the way Jaguar is managed and the direction of Jaguar's business.

In addition, Jaguar's Chief Executive Officer is also the interim chief executive officer of Napo and her duties as interim chief executive officer of Napo may conflict with her duties as Jaguar's Chief Executive Officer, and the resolution of these conflicts may not always be in Jaguar or your best interest.

Napo's principal business currently consists of, among other activities, the management of its intellectual property portfolio, including rights under license agreements with respect to such

Table of Contents

intellectual property. Napo has limited assets, and its primary sources of revenues in recent years have been license fees, warrant exercises, equity and debt investments and, since late 2013, the receipt of royalties pursuant to its license agreements, which have been limited to date. If Napo fails to generate sufficient revenues to cover its operating costs or the contemplated merger is not consummated, Napo could revise its business strategy in ways that could affect its relationship with Jaguar. For example, it could decide to divest its assets, including its stock in Jaguar. Napo's interests in managing its business, including its ownership in Jaguar, may conflict with your interests.

Jaguar may engage in future acquisitions that increase its capital requirements, dilute its stockholders, cause Jaguar to incur debt or assume contingent liabilities and subject Jaguar to other risks.

Jaguar may evaluate various strategic transactions, including licensing or acquiring complementary products, technologies or businesses. Any potential acquisitions may entail numerous risks, including increased operating expenses and cash requirements, assimilation of operations and products, retention of key employees, diversion of Jaguar management's attention and uncertainties in Jaguar's ability to maintain key business relationships of the acquired entities. In addition, if Jaguar undertakes acquisitions, Jaguar may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense. Moreover, Jaguar may not be able to locate suitable acquisition opportunities and this inability could impair Jaguar's ability to grow or obtain access to technology or products that may be important to the development of Jaguar's business.

Certain of the countries in which Jaguar plans to commercialize its products in the future are developing countries, some of which have potentially unstable political and economic climates.

Jaguar may commercialize its products in jurisdictions that are developing and emerging countries. This may expose Jaguar to the impact of political or economic upheaval, and Jaguar could be subject to unforeseen administrative or fiscal burdens. At present, Jaguar is not insured against the political and economic risks of operating in these countries. Any significant changes to the political or economic climate in any of the developing countries in which Jaguar operates or plans to sell products either now or in the future may have a substantial adverse effect on Jaguar's business, financial condition, trading performance and prospects.

Fluctuations in the exchange rate of foreign currencies could result in currency transactions losses.

As Jaguar expands its operations, Jaguar expects to be exposed to risks associated with foreign currency exchange rates. Jaguar anticipates that it will commercialize Neonorm for preweaned dairy calves and its line extensions, as well as possibly Canalevia and its line extensions in jurisdictions outside the United States. As a result, Jaguar will also be further affected by fluctuations in exchange rates in the future to the extent that sales are denominated in currencies other than U.S. dollars. Jaguar does not currently employ any hedging or other strategies to minimize this risk, although Jaguar may seek to do so in the future.

Risks Related to Jaguar's Intellectual Property

Jaguar is dependent upon its license agreement with Napo and if the agreement is terminated for any reason Jaguar's business will be harmed.

In January 2014, Jaguar entered into a license agreement with Napo, or the Napo License Agreement, which Jaguar amended and restated in August 2014 and further amended in January 2015. Pursuant to the Napo License Agreement, Jaguar acquired an exclusive worldwide license to Napo's intellectual property rights and technology, including rights to its library of over 2,300 medicinal plants, for all veterinary treatment uses and indications for all species of animals except humans. Under the

Table of Contents

terms of the Napo License Agreement, Jaguar is responsible for, and shall ensure, the development and commercialization of products that contain or are derived from the licensed Napo technology worldwide in the field of veterinary treatment uses and indications for all species of animals. In consideration for the license, Jaguar is obligated to pay a one-time non-refundable license fee and royalties. Napo has the right to terminate the Napo License Agreement upon Jaguar's uncured material breach of the agreement or if Jaguar declares bankruptcy. If the Napo License Agreement is terminated for any reason, Jaguar's business will be harmed.

Napo has also entered into secured financing agreements with certain secured lenders, for whom Nantucket Investments Limited is acting as collateral agent. The security includes certain assets, including the intellectual property and technology licensed to Jaguar pursuant to the Napo License Agreement and Napo's shares of Jaguar common stock. Although Napo and Nantucket Investments Limited, on behalf of the secured lenders, have entered into a non-disturbance agreement with respect to the Napo License Agreement, in the event of a bankruptcy of Napo or foreclosure action with respect to Napo's assets, there can be no guarantee that the bankruptcy trustee or any other party to such action will not attempt to interfere with or terminate the Napo License Agreement or otherwise require its terms to be changed, which could harm Jaguar's business. Under the terms of the Napo License Agreement, certain events, such as an acquisition of Napo or a sale by Napo of all of the intellectual property and technology licensed to Jaguar pursuant to the Napo License Agreement, should result in a fully-paid up license to Jaguar of all of such intellectual property and technology. If for any reason, Napo ceases to be the owner of the intellectual property and technology licensed to Jaguar pursuant to the Napo License Agreement in such a manner that did not result in a fully-paid up license provided for therein, the owner of such intellectual property and technology could attempt to interfere with or terminate the Napo License Agreement or otherwise attempt to renegotiate the arrangement, which would harm Jaguar's business.

If Napo experiences financial difficulties, becomes unable to pay its liabilities when due, or declares bankruptcy, its creditors could attempt to assert claims against Napo relating to the formation of Jaguar and the grant of an exclusive license to Jaguar.

Napo formed Jaguar in June 2013, and in January 2014, Jaguar entered into the Napo License Agreement. Napo currently has limited commercial operations, one FDA approved product, and other sources of revenue in the near term are limited to the third parties who have licensed or may license Napo's intellectual property and technology, or collaborate with Napo in the future. Napo was involved in litigation with Salix and expended significant resources in the litigation and subsequent settlement. At the time of the formation of Jaguar and the date of the Napo License Agreement, Napo's liabilities exceeded its assets on a balance sheet prepared in conformity with U.S. generally accepted accounting principles. Napo has been able to pay its liabilities when due but if Napo experiences financial difficulties, becomes unable to pay its liabilities when due, or declares bankruptcy, a creditor, trustee in bankruptcy, or other representative of a Napo bankruptcy estate could attempt to assert claims against us relating to Jaguar's formation and Napo's grant of an exclusive license to Jaguar. One theory such a party could use to challenge Jaguar's formation and the license grant is that of fraudulent conveyance. This theory is used by creditors to challenge the transfer of assets made with actual intent to hinder, delay, or defraud creditors, or where a financially distressed entity transfers assets without receiving reasonably equivalent value in exchange, provided such litigation is brought within the applicable statute of limitations. Although Jaguar does not believe that its formation or Napo's grant of the license was a fraudulent conveyance, litigation based on such theory, if successful, could result in a court order setting aside the license for the benefit of the creditor pursuing the litigation or all creditors of Napo should it occur in the context of a Napo bankruptcy. Even if unsuccessful, any such action would divert management's attention, potentially be costly to defend and could harm Jaguar's business.

Table of Contents

Jaguar currently does not own any issued patents, most of Jaguar's intellectual property is licensed from Napo and Jaguar cannot be certain that its patent strategy will be effective to enhance marketing exclusivity.

The patent prosecution process is expensive and time-consuming, and Jaguar may not be able to prepare, file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that Jaguar will fail to identify patentable aspects of inventions made in the course of development and commercialization activities in time to obtain patent protection on them. Moreover, in some circumstances, Jaguar may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that Jaguar licenses from third parties. In particular, Jaguar is dependent upon Napo and its licensees to file, prosecute and maintain the intellectual property Jaguar licenses pursuant to the Napo License Agreement. The patents and patent applications Jaguar licensed from Napo, or the Napo Patents, which cover both human and veterinary uses, were previously licensed by Napo to Salix for certain fields of human use. On March 4, 2016, Napo and Salix settled litigation and all rights to crofelemer and Mytesi were returned to Napo and the collaboration agreement between Salix and Napo, or the Salix Collaboration Agreement, was terminated. Napo has the responsibility to file, prosecute and maintain the Napo Patents. As a result, under the Napo License Agreement, Jaguar only has the right to maintain any issued patents within the Napo Patents that are not maintained in accordance with the responsibilities of Napo. There are three issued Napo Patents in the United States that cover, collectively, enteric protected formulations of proanthocyanidin polymers isolated from *Croton spp.* and methods of treating watery diarrhea using the enteric protected formulations for both human and veterinary uses.

Napo has also licensed its *Croton lechleri* related intellectual property to Glenmark and Luye Pharma Group Limited to develop and commercialize crofelemer for human indications in various geographies. Mytesi is dependent upon intellectual property protection from the Napo Patents. Napo currently markets Mytesi in the United States for human use and the three issued Napo Patents that cover enteric protected formulations of proanthocyanidin polymers isolated from *Croton spp.* and methods of treating watery diarrhea using the enteric protected formulations are listed in the FDA's Orange Book for Mytesi. Jaguar relies on these issued Napo Patents as intellectual property protection for Jaguar's prescription drug product candidates and non-prescription products. Pending patent applications within Napo Patents either may not be relevant to veterinary indications and/or may not issue as patents. If any patent application within the Napo Patents is not filed or prosecuted for any reason, including as a result of a lack of financial resources, and Jaguar is not able to file and prosecute such patent application within the Napo Patents, Jaguar's business may be harmed. In addition, as between Napo and Jaguar, Napo has the first right to enforce the Napo Patents against potential infringers. If Jaguar is not the party who enforces the Napo Patents, Jaguar will receive no proceeds from such enforcement action. In each case, such proceeds are subject to reimbursement of costs and expenses incurred by the other party in connection with such action. If Jaguar's current or future licensors fail to establish, maintain or protect such patents and other intellectual property rights, such rights may be reduced or eliminated.

Jaguar currently does not own any issued patents. Jaguar has filed and has currently pending three applications under the Patent Cooperation Treaty, or PCT, one U.S. non-provisional patent application and eight provisional patent applications in the veterinary field, of which Jaguar controls the filing, prosecution and maintenance; however, patents based on any patent applications Jaguar may submit may never be issued. Jaguar has an exclusive worldwide license from Napo to various issued patents and pending patent applications in the field of animal health. The strength of patents in the field of animal health involves complex legal and scientific questions and can be uncertain. Even if patents do successfully issue, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, Jaguar's patents, if issued, and the patents Jaguar has licensed may not adequately

Table of Contents

protect Jaguar's intellectual property or prevent others from designing around their claims. If Jaguar cannot obtain issued patents or the patents Jaguar has licensed are not maintained or their scope is significantly narrowed, Jaguar's business and prospects would be harmed.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of any patent applications and the enforcement or defense of any patents that issue. On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art, may affect patent litigation, and switch the U.S. patent system from a "first-to-invent" system to a "first-to-file" system. Under a "first-to-file" system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to the patent on an invention regardless of whether another inventor had made the invention earlier. The USPTO has developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first-to-file provisions, became effective on March 16, 2013. Among some of the other changes to the patent laws are changes that limit where a patentee may file a patent infringement suit and that provide opportunities for third parties to challenge any issued patent in the USPTO. The Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of Jaguar's patent applications and the enforcement or defense of any patents that issue, all of which could harm Jaguar's business and financial condition.

Obtaining and maintaining Jaguar's patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and Jaguar's patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance and annuity fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If Jaguar or its licensors fail to maintain the patents and patent applications covering prescription drug product candidates and non-prescription products, Jaguar's competitors might be able to enter the market, which would harm Jaguar's business.

Third parties may initiate legal proceedings alleging that Jaguar is infringing their intellectual property rights, which would be costly, time-consuming and, if successfully asserted against Jaguar, delay or prevent the development and commercialization of Jaguar's current or future products and product candidates.

Jaguar's research, development and commercialization activities may infringe or otherwise violate or be claimed to infringe or otherwise violate patents owned or controlled by other parties. There may be patents already issued of which Jaguar is unaware that might be infringed by one of Jaguar's current or future prescription drug product candidates or non-prescription products. Moreover, it is also possible that patents may exist that Jaguar is aware of, but that Jaguar does not believe are relevant to its current or future prescription drug product candidates or non-prescription products, which could nevertheless be found to block Jaguar's freedom to market these products. Because patent applications can take many years to issue and may be confidential for 18 months or more after filing, there may be

Table of Contents

applications now pending of which Jaguar is unaware and which may later result in issued patents that may be infringed by Jaguar's current or future prescription drug product candidates or non-prescription products. Jaguar cannot be certain that its current or future prescription drug product candidates or non-prescription products will not infringe these or other existing or future third-party patents. In addition, third parties may obtain patents in the future and claim that use of Jaguar's technologies infringes upon these patents.

To the extent Jaguar becomes subject to future third-party claims against Jaguar or its collaborators, Jaguar could incur substantial expenses and, if any such claims are successful, Jaguar could be liable to pay substantial damages, including treble damages and attorney's fees if Jaguar or its collaborators are found to be willfully infringing a third party's patents. If a patent infringement suit were brought against Jaguar or its collaborators, Jaguar or they could be forced to stop or delay research, development, manufacturing or sales of the prescription drug or non-prescription product that is the subject of the suit. Even if Jaguar is successful in defending such claims, infringement and other intellectual property claims can be expensive and time-consuming to litigate and divert management's attention from Jaguar's business and operations. As a result of or in order to avoid potential patent infringement claims, Jaguar or its collaborators may be compelled to seek a license from a third party for which Jaguar would be required to pay license fees or royalties, or both. Moreover, these licenses may not be available on acceptable terms, or at all. Even if Jaguar or its collaborators were able to obtain such a license, the rights may be nonexclusive, which could allow Jaguar's competitors access to the same intellectual property. Any of these events could harm Jaguar's business and prospects.

There has been substantial litigation regarding patents and other intellectual property rights in the field of therapeutics, as well as patent challenge proceedings, including interference, derivation and administrative law proceedings before the USPTO, and oppositions and other comparable proceedings in foreign jurisdictions. Under U.S. patent reform laws, new procedures, including *inter partes* review and post-grant review, were implemented as of September 16, 2012, with post-grant review available for patents issued on applications filed on or after March 16, 2013, and the implementation of such reform laws presents uncertainty regarding the outcome of any challenges to Jaguar's future patents, if any, and to patents Jaguar has in licensed. In addition to possible infringement claims against Jaguar, Jaguar may be subject to third-party pre-issuance submission of prior art to the USPTO, or become involved in opposition, derivation, reexamination, *inter partes* review, post-grant review, or other patent office proceedings or litigation in the United States or elsewhere, challenging Jaguar's patent rights or the patent rights of others. For applications filed before March 16, 2013 or patents issuing from such applications, if third parties have prepared and filed patent applications in the United States that also claim technology to which Jaguar has rights, Jaguar may have to participate in interference proceedings in the USPTO to determine the priority of invention. Because patent applications in the United States and most other countries are confidential for a period of time after filing, Jaguar cannot be certain that Jaguar was the first to either file patent applications on or invent any of the inventions claimed in Jaguar's patent applications. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal court necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Jaguar may also become involved in opposition or similar proceedings in patent offices in other jurisdictions regarding Jaguar's intellectual property rights with respect to Jaguar's prescription drug or non-prescription products and technology. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, Jaguar's future patent rights, if any, allow third parties to commercialize its technology or products and compete directly with Jaguar, without payment to Jaguar, or result in Jaguar's inability to manufacture or commercialize products without infringing third-party patent rights.

Table of Contents

Jaguar's proprietary position depends upon patents that are formulation or method-of-use patents, which do not prevent a competitor from using the same drug candidate for another use.

Composition-of-matter patents on the API in prescription drug products are generally considered to be the strongest form of intellectual property protection because such patents provide protection without regard to any particular method of use or manufacture or formulation of the API used. The composition-of-matter patents for crofelemer, the API in Canalevia, have expired, and Jaguar has licensed from Napo patents and applications covering formulations and methods of use for crofelemer and the botanical extract in Neonorm.

Method-of-use patents protect the use of a product for the specified method and formulation patents cover formulations of the API or botanical extract. These types of patents do not prevent a competitor from developing or marketing an identical product for an indication that is outside the scope of the patented method or from developing a different formulation that is outside the scope of the patented formulation. Moreover, with respect to method-of-use patents, even if competitors do not actively promote their product for Jaguar's targeted indications or uses for which Jaguar may obtain patents, veterinarians may recommend that animal owners use these products extra-label, or animal owners may do so themselves. Although extra-label use may infringe or contribute to the infringement of method-of-use patents, the practice is common and such infringement is difficult to prevent or prosecute.

If Jaguar efforts to protect intellectual property are not adequate, Jaguar may not be able to compete effectively in its markets.

Jaguar intends to rely upon a combination of regulatory exclusivity periods, patents, trade secret protection, confidentiality agreements, and license agreements to protect the intellectual property related to Jaguar's current prescription drug product candidates and non-prescription products and Jaguar's development programs.

If the breadth or strength of protection provided by any patents, patent applications or future patents Jaguar may own, license, or pursue with respect to any of its current or future product candidates or products is threatened, it could threaten Jaguar's ability to commercialize any of its current or future product candidates or products. Further, if Jaguar encounters delays in its development efforts, the period of time during which Jaguar could market any of its current or future product candidates or products under any patent protection Jaguar obtains would be reduced.

Given the amount of time required for the development, testing and regulatory review of new product candidates or products, patents protecting such candidates might expire before or shortly after such product candidates or products are commercialized. Patent term extensions have been applied for US 7,323,195 and US 7,341,744 to account for regulatory delays in obtaining human marketing approval for crofelemer, however, only one patent may be extended per marketed compound. If such extensions are received, then US 7,323,195 may be extended to June 2021 or US 7,341,744 may be extended to December 2020. However, the applicable authorities, including the USPTO and the FDA, and any equivalent regulatory authority in other countries, may not agree with Jaguar's assessment of whether such extensions are available, and may refuse to grant extensions to patents, or may grant more limited extensions than requested. If this occurs, Jaguar's competitors may take advantage of Jaguar's investment in development and trials by referencing Jaguar's clinical and preclinical data and launch their product earlier than might otherwise be the case.

Even where laws provide protection or Jaguar is able to obtain patents, costly and time-consuming litigation may be necessary to enforce and determine the scope of Jaguar's proprietary rights, and the outcome of such litigation would be uncertain. Moreover, any actions Jaguar may bring to enforce its intellectual property against its competitors could provoke them to bring counterclaims against Jaguar,

Table of Contents

and some of Jaguar's competitors have substantially greater intellectual property portfolios than Jaguar has.

If Jaguar is unable to prevent disclosure of its trade secrets or other confidential information to third parties, Jaguar's competitive position may be impaired.

Jaguar also relies on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or for which Jaguar has not filed patent applications, processes for which patents are difficult to enforce and other elements of Jaguar's product development processes that involve proprietary know-how, information or technology that is not covered by patents. Although Jaguar requires all of its employees to assign their inventions to Jaguar, and endeavor to execute confidentiality agreements with all of Jaguar's employees, consultants, advisors and any third parties who have access to Jaguar's proprietary know-how, information or technology, Jaguar cannot be certain that it has executed such agreements with all parties who may have helped to develop Jaguar's intellectual property or had access to Jaguar's proprietary information, or that Jaguar's agreements will not be breached. Jaguar cannot guarantee that its trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to Jaguar's trade secrets or independently develop substantially equivalent information and techniques. If Jaguar is unable to prevent disclosure of its intellectual property to third parties, Jaguar may not be able to maintain a competitive advantage in its market, which would harm its business.

Any disclosure to or misappropriation by third parties of Jaguar's confidential proprietary information could enable competitors to quickly duplicate or surpass Jaguar's technological achievements, and erode Jaguar's competitive position in its market.

Jaguar may be involved in lawsuits to protect or enforce any future patents issued to Jaguar, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe upon any patents that may issue to Jaguar, or any patents that Jaguar may license. To counter infringement or unauthorized use of any patents Jaguar may obtain, Jaguar may be required to file infringement claims or request that Jaguar's licensor file an infringement claim, which can be expensive and time-consuming to litigate. In addition, if Jaguar or one of its future collaborators were to initiate legal proceedings against a third party to enforce a patent covering Jaguar's current product candidates, or one of its future products, the defendant could counterclaim that the patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement or lack of statutory subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant material information from the USPTO, or made a materially misleading statement, during prosecution. Third parties may also raise similar validity claims before the USPTO in post-grant proceedings such as *ex parte* reexaminations, *inter partes* review, or post-grant review, or oppositions or similar proceedings outside the United States, in parallel with litigation or even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, Jaguar would lose at least part, and perhaps all, of any future patent protection on Jaguar's current or future product candidates. Such a loss of patent protection could harm Jaguar's business. Jaguar cannot be certain that there is no invalidating prior art, of which Jaguar and the patent examiner were unaware during prosecution. For the patents and patent applications that Jaguar has licensed, Jaguar may have limited or no right to participate in the defense of any licensed patents against challenge by a third party.

Litigation proceedings may fail and, even if successful, may result in substantial costs and distract Jaguar's management and other employees. Furthermore, because of the substantial amount of

Table of Contents

discovery required in connection with intellectual property litigation, there is a risk that some of Jaguar's confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be unsuccessful, it could have an adverse effect on the price of Jaguar common stock. Finally, Jaguar may not be able to prevent, alone or with the support of Jaguar's licensors, misappropriation of Jaguar's trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing Jaguar's ability to protect its products.

As is the case with other animal health product companies, Jaguar's success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the animal health industry involves both technological and legal complexity. Therefore, obtaining and enforcing patents is costly, time-consuming and inherently uncertain. In addition, the United States has recently enacted and implemented wide-ranging patent reform legislation. The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to Jaguar's ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken Jaguar's ability to obtain new patents or to enforce patents that Jaguar has licensed or that Jaguar might obtain in the future.

Jaguar may not be able to protect its intellectual property rights throughout the world, which could impair Jaguar's business.

Filing, prosecuting and defending patents on prescription drug products, product candidates and non-prescription products throughout the world would be prohibitively expensive. Competitors may use Jaguar's technologies in jurisdictions where Jaguar has not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where Jaguar may obtain patent protection, but where patent enforcement is not as strong as that in the United States. These products may compete with Jaguar's products in jurisdictions where Jaguar does not have any issued or licensed patents and any future patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to animal health products, which could make it difficult for Jaguar to stop the infringement of Jaguar's future patents, if any, or patents Jaguar has licensed, or marketing of competing products in violation of Jaguar's proprietary rights generally. Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, Jaguar may encounter significant problems in protecting and defending its intellectual property both in the United States and abroad. Proceedings to enforce Jaguar's future patent rights, if any, in foreign jurisdictions could result in substantial cost and divert Jaguar's efforts and attention from other aspects of its business.

Table of Contents

Jaguar's business could be harmed if it fails to obtain certain registered trademarks in the United States or in other countries.

In October 2014, Jaguar's trademark applications for Canalevia and Neonorm were approved for publication. Although Jaguar has filed a trademark application for its company name and its logo in the United States, Jaguar's applications have not been granted and the corresponding marks have not been registered in the United States. Jaguar has not filed for these or other trademarks in any other countries. During trademark registration proceedings, Jaguar may receive rejections of its trademark applications. If so, Jaguar will have an opportunity to respond, but Jaguar may be unable to overcome such rejections. In addition, the USPTO and comparable agencies in many foreign jurisdictions may permit third parties to oppose pending trademark applications and to seek to cancel registered trademarks. If opposition or cancellation proceedings are filed against any of Jaguar's trademark applications or any registered trademarks, Jaguar's trademarks may not survive such proceedings. Moreover, any name Jaguar proposes to use with its prescription drug product candidates in the United States, including Canalevia, must be approved by the FDA, regardless of whether Jaguar has registered or applied to register as a trademark. The FDA typically conducts a review of proposed prescription drug product names, including an evaluation of potential for confusion with other product names. If the FDA objects to any of Jaguar's proposed proprietary product names, Jaguar may be required to expend significant additional resources in an effort to identify a suitable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA.

Jaguar may be subject to claims that its employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

Jaguar has received confidential and proprietary information from third parties. In addition, Jaguar employs individuals who were previously employed at other biotechnology, pharmaceutical or animal health companies. Jaguar may be subject to claims that it or its employees, consultants or independent contractors have inadvertently or otherwise improperly used or disclosed confidential information of these third parties or Jaguar's employees' former employers. Litigation may be necessary to defend against any such claims. Even if Jaguar is successful in defending against any such claims, such litigation could result in substantial cost and be a distraction to Jaguar's management and employees.

Risks Related to Government Regulation of Jaguar's Business

Even if Jaguar receives any required regulatory approvals for its current or future prescription drug product candidates and non-prescription products, Jaguar will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense.

If the FDA or any other regulatory body approves any of Jaguar's current or future prescription drug product candidates, or if necessary, its non-prescription products, the manufacturing processes, clinical development, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product may be subject to extensive and ongoing regulatory requirements. These requirements could include, but are not limited to, submissions of efficacy and safety and other post-marketing information and reports, establishment registration, and product listing, compliance with new rules promulgated under the FSMA, as well as continued compliance with cGMP, GLP and GCP for any studies that Jaguar conducts post-approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with Jaguar's contract manufacturers or manufacturing processes, or failure to comply with regulatory requirements, are reportable events to the FDA and may result in, among other things:

restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, revised labeling, or voluntary or involuntary product recalls;

additional clinical studies fines, warning letters or holds on target animal studies;

Table of Contents

refusal by the FDA, or other regulators to approve pending applications or supplements to approved applications filed by Jaguar or Jaguar's strategic collaborators related to the unknown problems, or suspension or revocation of the problematic product's license approvals;

product seizure or detention, or refusal to permit the import or export of products; and

injunctions or the imposition of civil or criminal penalties.

The FDA or other regulatory agency's policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of Jaguar's product candidates or require certain changes to the labeling or additional clinical work concerning safety and efficacy of the product candidates. Jaguar cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If Jaguar is slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if Jaguar is not able to maintain regulatory compliance, Jaguar may lose any marketing approval that it may have obtained and it may not achieve or sustain profitability, which would harm its business. In addition, failure to comply with these regulatory requirements could result in significant penalties.

In addition, from time to time, Jaguar may enter into consulting and other financial arrangements with veterinarians, who prescribe or recommend Jaguar's products, once approved. As a result, Jaguar may be subject to state, federal and foreign healthcare and/or veterinary medicine laws, including but not limited to anti-kickback laws. If Jaguar's financial relationships with veterinarians are found to be in violation of such laws that apply to Jaguar, Jaguar may be subject to penalties.

The issuance by the FDA of protocol concurrences for Jaguar's pivotal studies does not guarantee ultimate approval of its NADA.

Jaguar intends to seek protocol concurrences from the FDA for the pivotal trial of Canalevia that Jaguar has initiated for acute diarrhea in dogs and for future pivotal trials in other indications. A pivotal study protocol is submitted to the FDA by a drug sponsor for purposes of obtaining FDA review of the protocol. Prior FDA review of the protocol for a pivotal study makes it more likely that the study will generate information the sponsor needs to demonstrate whether the drug is safe and effective for its intended use. It creates an expectation by the sponsor that the FDA should not later alter its perspectives on these issues unless public or animal health concerns appear that were not recognized at the time of protocol assessment. Even if the FDA issues a protocol concurrence, ultimate approval of an NADA by the FDA is not guaranteed because a final determination that the agreed-upon protocol satisfies a specific objective, such as the demonstration of efficacy, or supports an approval decision, will be based on a complete review of all the data submitted to the FDA. Even if Jaguar were to obtain protocol concurrence such concurrence does not guarantee that the results of the study will support a particular finding or approval of the new drug.

Any of Jaguar's current or future prescription drug product candidates or non-prescription products may cause or contribute to adverse medical events that Jaguar would be required to report to regulatory authorities and, if Jaguar fails to do so, Jaguar could be subject to sanctions that would harm its business.

If Jaguar is successful in commercializing any of its current or future prescription drug product candidates or non-prescription products, certain regulatory authorities will require that Jaguar report certain information about adverse medical events if those products may have caused or contributed to those adverse events. The timing of Jaguar's obligation to report would be triggered by the date Jaguar becomes aware of the adverse event as well as the nature of the event. Jaguar may fail to report adverse events it becomes aware of within the prescribed timeframe. Jaguar may also fail to appreciate that it has become aware of a reportable adverse event, especially if such event is not reported to Jaguar as an adverse event or if it is an adverse event that is unexpected or removed in time from the

Table of Contents

use of Jaguar's products. If Jaguar fails to comply with its reporting obligations, the regulatory authorities could take action including, but not limited to, criminal prosecution, seizure of Jaguar's products, facility inspections, removal of Jaguar's products from the market, recalls of certain lots or batches, or cause a delay in approval or clearance of future products.

Legislative or regulatory reforms with respect to animal health may make it more difficult and costly for Jaguar to obtain regulatory clearance or approval of any of Jaguar's current or future product candidates and to produce, market, and distribute Jaguar's products after clearance or approval is obtained.

From time to time, legislation is drafted and introduced in the U.S. Congress or other jurisdictions in which Jaguar intends to operate that could significantly change the statutory provisions governing the testing, regulatory clearance or approval, manufacture, and marketing of regulated products. In addition, the FDA's regulations and guidance are often revised or reinterpreted by the FDA and such other regulators in ways that may significantly affect Jaguar's business and its products and product candidates. Similar changes in laws or regulations can occur in other countries. Any new regulations or revisions or reinterpretations of existing regulations in the United States or in other countries may impose additional costs or lengthen review times of any of Jaguar's current or future products and product candidates. Jaguar cannot determine what effect changes in regulations, statutes, legal interpretation or policies, when and if promulgated, enacted or adopted may have on Jaguar's business in the future. Such changes could, among other things, require:

changes to manufacturing methods;

additional clinical trials or testing;

new requirements related to approval to enter the market;

recall, replacement, or discontinuance of certain products; and

additional record keeping or the development of certain regulatory required hazard identification plans.

Each of these would likely entail substantial time and cost and could harm Jaguar's financial results. In addition, delays in receipt of or failure to receive regulatory clearances or approvals for any future products would harm Jaguar's business, financial condition, and results of operations.

Jaguar believes that its non-prescription products are not subject to regulation by regulatory agencies in the United States, but there is a risk that regulatory bodies may disagree with Jaguar's interpretation, or may redefine the scope of its regulatory reach in the future, which would result in additional expense and could delay or prevent the commercialization of these products.

The FDA retains jurisdiction over all animal prescription drug products however, in many instances, the Federal Trade Commission will exercise primary or concurrent jurisdiction with FDA on non-prescription products as to post marketing claims made regarding the product. On April 22, 1996, the FDA published a statement in the Federal Register, 61 FR 17706, that it believes that the Dietary Supplement and Health Education Act, or DSHEA, does not apply to animal health supplement products, such as Jaguar's non-prescription products. Accordingly, the FDA's Center for Veterinary Medicine only regulates those animal supplements that fall within the FDA's definition of an animal drug, animal food or animal feed additive. The Federal Food Drug and Cosmetic Act defines food as "articles used for food or drink for man or other animals and articles used as components of any such article." Animal foods are not subject to pre-market approval and are designed to provide a nutritive purpose to the animals that receive them. Feed additives are defined as those articles that are added to an animal's feed or water as illustrated by the guidance documents. Jaguar's non-prescription products are not added to food, are not ingredients in food nor are they added to any animal's drinking water. Therefore, Jaguar's non-prescription products do not fall within the definition of a food or feed

Table of Contents

additive. In light of the pronouncement by the FDA that the DSHEA was not intended to apply to animals, the FDA seeks to regulate such supplements as food or food additives depending on the intended use of the product. The intended use is demonstrated by how the article is included in a food, or added to the animals' intake (*i.e.*, through its drinking water). If the intended use of the product does not fall within the proscribed use making the product a food, it cannot be regulated as a food. There is no intent to make Jaguar's non-prescription products a component of an animal food, either directly or indirectly. A feed additive is a product that is added to a feed for any reason including the top dressing of an already prepared feed. Some additives, such as certain forage, are deemed to be Generally Recognized as Safe, or GRAS, and therefore, not subject to a feed Additive Petition approval prior to use. However, the substances deemed GRAS are generally those that are recognized as providing nutrients as a food does. Jaguar does not believe that its non-prescription products fit within this framework either. Finally, a new animal drug refers to drugs intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in animals. Jaguar's non-prescription Neonorm Foal and Neonorm Calf products are not intended to diagnose, cure, mitigate, treat or prevent disease and therefore, do not fit within the definition of an animal drug. Additionally, because a previously marketed human formulation of the botanical extract in Jaguar's non-prescription products was regulated as a human dietary supplement subject to the DSHEA (and not regulated as a drug by the FDA), Jaguar does not believe that the FDA would regulate the animal formulation used in its non-prescription products in a different manner. Jaguar does not believe that its non-prescription products fit the definition of an animal drug, food or food additive and therefore are not regulated by the FDA at this time.

However, despite many such unregulated animal supplements currently on the market, the FDA may choose in the future to exercise jurisdiction over animal supplement products in which case, Jaguar may be subject to unknown regulations thereby inhibiting its ability to launch or to continue marketing its non-prescription products. In the past, the FDA has redefined or attempted to redefine some non-prescription non-feed products as falling within the definition of drug, feed or feed additive and therefore subjected those products to the relevant regulations. Jaguar has not discussed with the FDA its belief that the FDA currently does not exercise jurisdiction over Jaguar's non-prescription products. Should the FDA assert regulatory authority over Jaguar's non-prescription products, Jaguar would take commercially reasonable steps to address the FDA's concerns, potentially including but not limited to, seeking registration for such products, reformulating such products to further distance such products from regulatory control, or ceasing sale of such products. Further, the Animal and Plant Health Inspection Service, an agency of the USDA, may at some point choose to exercise jurisdiction over certain non-prescription products that are not intended for production animals. Jaguar does not believe it is currently subject to such regulation, but could be in the future. If the FDA or other regulatory agencies, such as the USDA, try to regulate Jaguar's non-prescription products, Jaguar could be required to seek regulatory approval for its non-prescription products, which would result in additional expense and could delay or prevent the commercialization of these products.

Risks Related to Ownership of Jaguar's Common Stock

Jaguar's failure to meet the continued listing requirements of The NASDAQ Capital Market could result in a delisting of its common stock.

Jaguar's common stock is listed on The NASDAQ Capital Market, which imposes, among other requirements, a minimum stockholders equity requirement. On August 22, 2016 Jaguar received a notice from NASDAQ of non-compliance with its continuing listing rules, namely that Jaguar's stockholders' equity at June 30, 2016 of \$1,565,316, as reported in Jaguar's Form 10-Q for the quarter then ended, was less than the \$2,500,000 minimum. The failure to meet continuing compliance standards subjects Jaguar common stock to delisting. Based on the plan that Jaguar submitted to regain

Table of Contents

compliance, the Securities and Exchange Commission, or the SEC, granted Jaguar an extension until February 21, 2017 to regain compliance.

On February 22, 2017, Jaguar received a letter from NASDAQ stating that NASDAQ determined that Jaguar did not meet the terms of the extension and that Jaguar's securities are subject to delisting from NASDAQ unless Jaguar timely requests a hearing before the NASDAQ Hearings Panel (sometimes referred to herein as the "Panel"). Jaguar has timely requested a hearing before the Panel, at which Jaguar will present its plan to satisfy the \$2,500,000 stockholders' equity requirement (or the alternatives of market value of listed securities of \$35 million or net income from continuing operations) and request the continued listing of its common stock on NASDAQ pending its return to compliance. Jaguar's timely request for a hearing has stayed any delisting action by NASDAQ and Jaguar's securities will continue to trade on The NASDAQ Capital Market under the symbol "JAGX" at least pending the ultimate outcome of the hearing and the expiration of any extension period that may be granted by the Panel in response to Jaguar's request for continued listing on NASDAQ.

Another requirement for continued listing on The NASDAQ Capital Market is the minimum bid requirement. The closing bid price for Jaguar common stock must remain at or above \$1.00 per share to comply with NASDAQ's minimum bid requirement for continued listing. If the closing bid price for Jaguar common stock is less than \$1.00 per share for 30 consecutive business days, NASDAQ may send Jaguar a notice stating Jaguar will be provided a period of 180 days to regain compliance with the minimum bid requirement or else NASDAQ may make a determination to delist Jaguar common stock. Jaguar common stock traded for less than \$1.00 for 30 consecutive business days, and Jaguar received notice of this from The NASDAQ Capital Market on December 28, 2016. Jaguar had a 180 calendar day grace period, or until June 26, 2017, to regain compliance with the minimum bid price requirement. The minimum bid price requirement will be met if Jaguar common stock has a minimum closing bid price of at least \$1.00 per share for a minimum of 10 consecutive business days during the 180 calendar day grace period. On March 7, 2017, Jaguar received notice from NASDAQ that Jaguar had regained compliance with the minimum bid price requirement.

The delisting of Jaguar common stock from NASDAQ may make it more difficult for Jaguar to raise capital on favorable terms in the future. Such a delisting would likely have a negative effect on the price of Jaguar common stock and would impair your ability to sell or purchase Jaguar common stock when you wish to do so. Further, if Jaguar were to be delisted from The NASDAQ Capital Market, Jaguar common stock would cease to be recognized as covered securities and Jaguar would be subject to regulation in each state in which it offers its securities.

While Jaguar presented a plan to regain compliance, there can be no assurance that its plan will be successful. Moreover, there is no assurance that any actions that Jaguar takes to restore its compliance with NASDAQ's listing requirements would stabilize the market price or improve the liquidity of Jaguar common stock, prevent Jaguar common stock from falling below the NASDAQ minimum bid price required for continued listing again or prevent future non-compliance with NASDAQ's listing requirements.

If Jaguar's shares become subject to the penny stock rules, it would become more difficult to trade Jaguar's shares.

The SEC has adopted rules that regulate broker-dealer practices in connection with transactions in penny stocks. Penny stocks are generally equity securities with a price of less than \$5.00, other than securities registered on certain national securities exchanges or authorized for quotation on certain automated quotation systems, provided that current price and volume information with respect to transactions in such securities is provided by the exchange or system. If Jaguar does not retain a listing on The NASDAQ Capital Market and if the price of Jaguar common stock is less than \$5.00, Jaguar common stock will be deemed a penny stock. The penny stock rules require a broker-dealer, before a

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

transaction in a penny stock not otherwise exempt from those rules, to deliver a standardized risk disclosure document containing specified information. In addition, the penny stock rules require that before effecting any transaction in a penny stock not otherwise exempt from those rules, a broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive (i) the purchaser's written acknowledgment of the receipt of a risk disclosure statement; (ii) a written agreement to transactions involving penny stocks and (iii) a signed and dated copy of a written suitability statement. These disclosure requirements may have the effect of reducing the trading activity in the secondary market for Jaguar common stock, and therefore stockholders may have difficulty selling their shares.

The price of Jaguar common stock could be subject to volatility related or unrelated to Jaguar's operations, and purchasers of Jaguar common stock could incur substantial losses.

The trading price of Jaguar common stock could be subject to wide fluctuations in response to various factors, some of which are beyond Jaguar's control. These factors include those discussed previously in this "Risk Factors" section of this report and others, such as:

delays in the commercialization of Neonorm, Canalevia, Equilevia or Jaguar's other current or future prescription drug product candidates and non-prescription products;

any delays in, or suspension or failure of, Jaguar's current and future studies;

announcements of regulatory approval or disapproval of any of Jaguar's current or future product candidates or of regulatory actions affecting Jaguar or its industry;

manufacturing and supply issues that affect product candidate or product supply for Jaguar's studies or commercialization efforts;

quarterly variations in Jaguar's results of operations or those of Jaguar's competitors;

changes in Jaguar's earnings estimates or recommendations by securities analysts;

the payment of licensing fees or royalties in shares of Jaguar common stock;

announcements by Jaguar or its competitors of new prescription drug products or product candidates or non-prescription products, significant contracts, commercial relationships, acquisitions or capital commitments;

announcements relating to future development or license agreements including termination of such agreements;

adverse developments with respect to Jaguar's intellectual property rights or those of Jaguar's principal collaborators;

commencement of litigation involving Jaguar or its competitors;

any major changes in Jaguar's board of directors or management;

new legislation in the United States relating to the prescription, sale, distribution or pricing of animal health products;

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

product liability claims, other litigation or public concern about the safety of Jaguar's prescription drug product candidates and non-prescription products or any such future products;

market conditions in the animal industry, in general, or in the animal health sector, in particular, including performance of Jaguar's competitors; and

general economic conditions in the United States and abroad.

Table of Contents

In addition, the stock market, in general, or the market for stocks in Jaguar's industry, in particular, may experience broad market fluctuations, which may adversely affect the market price or liquidity of Jaguar common stock. Any sudden decline in the market price of Jaguar common stock could trigger securities class-action lawsuits against Jaguar. If any of Jaguar's stockholders were to bring such a lawsuit against Jaguar, Jaguar could incur substantial costs defending the lawsuit and the time and attention of Jaguar's management would be diverted from its business and operations. Jaguar also could be subject to damages claims if it were found to be at fault in connection with a decline in its stock price.

No active market for Jaguar common stock exists or may develop, and you may not be able to resell Jaguar common stock at or above the public offering price.

Prior to Jaguar's initial public offering in May 2015, there was no public market for shares of Jaguar common stock. The listing of Jaguar common stock on The NASDAQ Capital Market does not assure that a meaningful, consistent and liquid trading market exists. Although Jaguar common stock is listed on The NASDAQ Capital Market, trading volume in Jaguar common stock has been limited and an active trading market for Jaguar shares may never develop or be sustained. If an active market for Jaguar common stock does not develop, you may be unable to sell your shares when you wish to sell them or at a price that you consider attractive or satisfactory. The lack of an active market may also adversely affect Jaguar's ability to raise capital by selling securities in the future, or impair Jaguar's ability to license or acquire other product candidates, businesses or technologies using Jaguar's shares as consideration.

The sale of Jaguar common stock to Aspire Capital may cause substantial dilution to Jaguar's existing stockholders and the sale of the shares of common stock acquired by Aspire Capital could cause the price of Jaguar common stock to decline.

On June 8, 2016, Jaguar entered into the CSPA with Aspire Capital, in which Aspire Capital committed to purchase, at Jaguar's election, up to an aggregate of \$15.0 million shares of Jaguar common stock over a period of approximately 30 months (i.e., 30 months from July 8, 2016, the effective date of the initial registration statement on Form S-1 that Jaguar filed to register the shares that it issued and may issue to Aspire pursuant to the CSPA).

Through January 31, 2017, Jaguar has issued 2,027,490 shares of Jaguar common stock to Aspire Capital under the CSPA for gross proceeds of approximately \$2.7 million. Jaguar may ultimately sell all, some or none of the approximately \$12.3 million of common stock remaining under the CSPA to Aspire Capital, and Aspire Capital may sell all, some or none of Jaguar shares that it holds or comes to hold under the CSPA. Sales by Aspire Capital of shares acquired pursuant to the CSPA may result in dilution to the interests of other holders of Jaguar common stock. The sale of a substantial number of shares of Jaguar common stock by Aspire Capital, or anticipation of such sales, could make it more difficult for Jaguar to sell equity or equity-related securities in the future at a time and at a price that Jaguar might otherwise wish to effect sales. However, Jaguar has the right to control the timing and amount of sales of its shares to Aspire Capital, and the CSPA may be terminated by Jaguar at any time at its discretion without any penalty or cost to Jaguar.

If securities or industry analysts do not publish research or reports about Jaguar, or if they issue adverse or misleading opinions regarding Jaguar or its stock, Jaguar's stock price and trading volume could decline.

The trading market for Jaguar common stock depends in part on the research and reports that industry or financial analysts publish about Jaguar or its business. Jaguar does not influence or control the reporting of these analysts. If one or more of the analysts who do cover Jaguar downgrade or provide a negative outlook on Jaguar or its industry, or the stock of any of its competitors, the price of its common stock could decline. If one or more of these analysts ceases coverage of Jaguar, Jaguar

Table of Contents

could lose visibility in the market, which in turn could cause the price of Jaguar common stock to decline.

You may be diluted by exercises of outstanding options and warrants.

As of December 31, 2016, Jaguar had outstanding options to purchase an aggregate of 2,571,220 shares of Jaguar common stock at a weighted average exercise price of \$2.52 per share and warrants to purchase an aggregate of 5,968,876 shares of Jaguar common stock at a weighted-average exercise price of \$1.40 per share.

In addition, Jaguar will assume outstanding options and warrants to purchase shares of Napo common stock in the merger. Each outstanding option and warrant to acquire Napo common stock will be converted automatically at the effective time of the merger into an option or warrant to acquire Jaguar common stock. The number of shares of Jaguar common stock for which each option or warrant is exercisable will be equal to the product of the number of shares of Napo common stock previously subject to the Napo option or warrant and 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger), rounded down to the next whole share, and the exercise price of each option or warrant will be equal to the exercise price for each share of Napo common stock previously subject to the option or warrant immediately prior to completion of the merger, divided by 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger), rounded up to the nearest whole cent. In addition, in connection with Napo's debt settlement with an existing creditor, upon consummation of the merger, Jaguar expects to issue warrants exercisable for an aggregate of 1,237,283 shares of Jaguar common stock at an exercise price of \$0.08 per share.

The exercise of such options and warrants will result in further dilution of your investment. In addition, you may experience additional dilution if Jaguar issues common stock in the future. As a result of this dilution, you may receive significantly less in net tangible book value than the full purchase price you paid for the shares in the event of liquidation.

Provisions in Jaguar's charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management.

Jaguar's second amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent changes in control or changes in Jaguar's management without the consent of Jaguar's board of directors. These provisions to include the following:

a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of Jaguar's board of directors;

no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;

the exclusive right of Jaguar's board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on Jaguar's board of directors;

the ability of Jaguar's board of directors to authorize the issuance of shares of preferred stock and to determine the terms of those shares, including preferences and voting rights, without stockholder approval, which could adversely affect the rights of Jaguar's common stockholders or be used to deter a possible acquisition of Jaguar;

Table of Contents

the ability of Jaguar's board of directors to alter its bylaws without obtaining stockholder approval;

the required approval of the holders of at least 75% of the shares entitled to vote at an election of directors to adopt, amend or repeal Jaguar's bylaws or repeal the provisions of Jaguar's second amended and restated certificate of incorporation regarding the election and removal of directors;

a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of Jaguar's stockholders;

the requirement that a special meeting of stockholders may be called only by the chairman of the board of directors, the chief executive officer, the president or the board of directors, which may delay the ability of Jaguar's stockholders to force consideration of a proposal or to take action, including the removal of directors; and

advance notice procedures that stockholders must comply with in order to nominate candidates to Jaguar's board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of Jaguar.

These provisions could inhibit or prevent possible transactions that some stockholders may consider attractive.

Jaguar is also subject to the anti-takeover provisions contained in Section 203 of the Delaware General Corporation Law. Under Section 203, a corporation generally may not engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other exceptions, the board of directors has approved the transaction.

Jaguar's amended and restated bylaws designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain actions and proceedings that may be initiated by Jaguar's stockholders, which could limit Jaguar stockholders' ability to obtain a favorable judicial forum for disputes with Jaguar or its directors, officers or other employees.

Jaguar's amended and restated bylaws provide that, unless Jaguar consents in writing to an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on Jaguar's behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee to Jaguar or its stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, (iv) any action asserting a claim that is governed by the internal affairs doctrine or (v) any action to interpret, apply, enforce or determine the validity of Jaguar's certificate of incorporation or bylaws. Any person purchasing or otherwise acquiring any interest in any shares of Jaguar's capital stock shall be deemed to have notice of and to have consented to this provision of Jaguar's amended and restated bylaws. This choice-of-forum provision may limit Jaguar stockholders' ability to bring a claim in a judicial forum that it finds favorable for disputes with Jaguar or its directors, officers or other employees, which may discourage such lawsuits. Alternatively, if a court were to find this provision of Jaguar's amended and restated bylaws inapplicable or unenforceable with respect to one or more of the specified types of actions or proceedings, Jaguar may incur additional costs associated with resolving such matters in other jurisdictions, which could harm Jaguar's business and financial condition.

Table of Contents

Jaguar does not intend to pay dividends on its common stock, and your ability to achieve a return on your investment will depend on appreciation in the market price of Jaguar common stock.

Jaguar currently intends to invest its future earnings, if any, to fund Jaguar's growth and not to pay any cash dividends on its common stock. Moreover, upon consummation of the merger, so long as Nantucket or any of its affiliates owns any shares of Jaguar non-voting common stock, Jaguar cannot pay dividends on its common stock or non-voting common stock without obtaining the prior written consent of Nantucket. Because Jaguar does not intend to pay dividends and may be required to obtain written consent following the merger if it were to do so, your ability to receive a return on your investment will depend on any future appreciation in the market price of Jaguar common stock. Jaguar cannot be certain that Jaguar common stock will appreciate in price.

Jaguar principal stockholders own a significant percentage of Jaguar's stock and will be able to exert significant control over matters subject to stockholder approval.

As of April 12, 2017, Jaguar's executive officers, directors, holders of 5% or more of Jaguar capital stock and their respective affiliates beneficially owned in the aggregate approximately 58.0% of Jaguar outstanding shares of common stock. Immediately following completion of the merger, Jaguar stockholders immediately prior to the merger will own approximately 25% of Jaguar's outstanding common stock and non-voting common stock and the Napo Stakeholders will own approximately 75% of Jaguar's outstanding common stock and non-voting common stock, with Nantucket owning approximately 46.5% of Jaguar's outstanding common stock and non-voting common stock, in each case calculated based on a fully diluted basis of Jaguar as of March 31, 2017, assuming the exercise or conversion of all outstanding options and warrants other than those options and warrants exercisable or convertible for approximately 300,000 shares of Jaguar common stock with an exercise/conversion price of \$5.00 or more. As a result of their stock ownership, these stockholders may have the ability to influence Jaguar's management and policies, and will be able to significantly affect the outcome of matters requiring stockholder approval such as elections of directors, amendments of Jaguar's organizational documents or approvals of any merger, sale of assets or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for Jaguar common stock that you may feel are in your best interest as one of Jaguar's stockholders.

The requirements of being a public company, including compliance with the reporting requirements of the Exchange Act and the requirements of the Sarbanes-Oxley Act, may strain Jaguar's resources, increase Jaguar's costs and distract management, and Jaguar may be unable to comply with these requirements in a timely or cost-effective manner.

Jaguar's initial public offering had a significant, transformative effect on Jaguar. Prior to Jaguar initial public offering, Jaguar's business operated as a privately-held company, and Jaguar was not required to comply with public reporting, corporate governance and financial accounting practices and policies required of a publicly-traded company. As a publicly-traded company, Jaguar incurs significant additional legal, accounting and other expenses compared to historical levels. In addition, new and changing laws, regulations and standards relating to corporate governance and public disclosure, including the Dodd-Frank Wall Street Reform and Consumer Protection Act and the rules and regulations thereunder, as well as under the Sarbanes-Oxley Act, the JOBS Act and the rules and regulations of the SEC and The NASDAQ Capital Market, may result in an increase in Jaguar's costs and the time that Jaguar's board of directors and management must devote to Jaguar's compliance with these rules and regulations. These rules and regulations have substantially increased Jaguar's legal and financial compliance costs and diverted management time and attention from Jaguar's product development and other business activities.

The Sarbanes-Oxley Act requires, among other things, that Jaguar assess the effectiveness of its internal control over financial reporting annually and the effectiveness of Jaguar's disclosure controls

Table of Contents

and procedures quarterly. In particular, Section 404 of the Sarbanes-Oxley Act, or Section 404, requires Jaguar to perform system and process evaluation and testing of Jaguar's internal control over financial reporting to allow management to report on, and Jaguar's independent registered public accounting firm potentially to attest to, the effectiveness of Jaguar's internal control over financial reporting. Jaguar has needed to expend time and resources on documenting its internal control over financial reporting so that Jaguar is in a position to perform such evaluation when required. As an "emerging growth company," Jaguar expects to avail itself of the exemption from the requirement that its independent registered public accounting firm attest to the effectiveness of its internal control over financial reporting under Section 404. However, Jaguar may no longer avail itself of this exemption when it ceases to be an "emerging growth company." When Jaguar's independent registered public accounting firm is required to undertake an assessment of its internal control over financial reporting, the cost of Jaguar's compliance with Section 404 will correspondingly increase. Jaguar's compliance with applicable provisions of Section 404 requires that Jaguar incur substantial accounting expense and expend significant management time on compliance-related issues as Jaguar implements additional corporate governance practices and comply with reporting requirements. Moreover, if Jaguar is not able to comply with the requirements of Section 404 applicable to Jaguar in a timely manner, or if Jaguar or its independent registered public accounting firm identifies deficiencies in Jaguar's internal control over financial reporting that are deemed to be material weaknesses, the market price of Jaguar's stock could decline and Jaguar could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources.

Jaguar is an "emerging growth company" and it cannot be certain if the reduced disclosure requirements applicable to "emerging growth companies" will make its common stock less attractive to investors.

Jaguar is an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and Jaguar may take advantage of certain exemptions and relief from various reporting requirements that are applicable to other public companies that are not "emerging growth companies." In particular, while Jaguar is an "emerging growth company" (i) it will not be required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act, (ii) it will be subject to reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements and (iii) it will not be required to hold nonbinding advisory votes on executive compensation or stockholder approval of any golden parachute payments not previously approved. In addition, the JOBS Act provides that an emerging growth company can delay its adoption of any new or revised accounting standards, but Jaguar has irrevocably elected not to avail itself of this exemption and, therefore, Jaguar will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. In addition, investors may find Jaguar common stock less attractive if Jaguar relies on the exemptions and relief granted by the JOBS Act. If some investors find Jaguar common stock less attractive as a result, there may be a less active trading market for Jaguar common stock and Jaguar's stock price may decline and/or become more volatile.

Jaguar may remain an "emerging growth company" until as late as December 31, 2020 (the fiscal year-end following the fifth anniversary of the closing of Jaguar's initial public offering, which occurred on May 18, 2015), although Jaguar may cease to be an "emerging growth company" earlier under certain circumstances, including (i) if the market value of Jaguar common stock that is held by non-affiliates exceeds \$700.0 million as of any June 30, in which case Jaguar would cease to be an "emerging growth company" as of December 31 of such year, (ii) if Jaguar's gross revenue exceeds \$1.0 billion in any fiscal year or (iii) if Jaguar issues more than \$1.0 billion of non-convertible debt over a three-year period.

Table of Contents

Risks Related to Napo's Business

Napo has a limited operating history and may be unable to achieve or sustain profitability or continue as a going concern.

Since Napo's formation in 2001, its operations have been primarily limited to the research and development of Napo's lead prescription drug product, Mytesi. Net sales of Mytesi since June 2016 when Napo initiated sales of Mytesi have been \$955,220 through December 31, 2016. Napo's net loss and comprehensive loss for the year ended December 31, 2016 was \$20,393,028. As more fully described in Note 1 to Napo's financial statements included in this joint proxy statement/prospectus, Napo believes there is substantial doubt about its ability to continue as a going concern as it does not currently have sufficient cash resources to fund its operations through March 24, 2018, one year from the date its audited financial statements were originally issued.

Napo expects to incur significant additional costs as it continues commercialization efforts for current prescription drug product candidates or other product candidates, and undertake the clinical trials necessary to obtain related regulatory approvals.

Napo is actively identifying additional products for development and commercialization, and will continue to expend substantial resources for the foreseeable future to develop products from Napo's proprietary library of more than 2,300 medicinal plants. These expenditures will include costs associated with:

identifying additional potential prescription drug product candidates and non-prescription products;

formulation studies;

conducting pilot, pivotal and toxicology studies;

completing other research and development activities;

payments to technology licensors;

maintaining Napo's intellectual property;

obtaining necessary regulatory approvals;

establishing commercial supply capabilities; and

sales, marketing and distribution of Napo's commercialized products.

Napo also may incur unanticipated costs in connection with developing and commercializing Napo's products. Because the outcome of Napo's development activities and commercialization efforts is inherently uncertain, the actual amounts necessary to successfully complete the development and commercialization of Napo's current or future products and product candidates may be greater than Napo anticipates.

Because Napo anticipates incurring significant costs for the foreseeable future, if Napo is not successful in broadly commercializing any of Napo's current or future products or product candidates or raising additional funding to pursue Napo's research and development efforts, Napo may never realize the benefit of its development efforts and Napo's business may be harmed.

Table of Contents

Napo will need to raise substantial additional capital in the future to fund Napo's operations and Napo may be unable to raise such funds when needed and on acceptable terms, which would force Napo to delay, limit, reduce or terminate one or more of Napo's product development programs or future commercialization efforts.

Napo currently has limited commercial operations and its primary source of revenue is from the sale of Mytesi. Other current potential revenue sources are limited to the third parties who have licensed or may license Napo's intellectual property and technology, or collaborate with Napo in the future. Napo was involved in litigation with Salix and expended significant resources in the litigation and subsequent settlement. At the time of the formation of Jaguar, Napo's liabilities exceeded its assets on a balance sheet prepared in conformity with U.S. generally accepted accounting principles. Napo is forecasting continued losses and negative cash flows as Napo continues to fund its operating and marketing activities and research and development programs, and to complete the development of all the current products in Napo's pipeline, or any additional products Napo may identify. Napo may need to seek additional funds sooner than planned through public or private equity or debt financings or other sources such as strategic collaborations. Other than Napo's Amended and Restated Note Purchase Agreement (sometimes referred to herein as the Kingdon NPA) with Kingdon Associates, M. Kingdon Offshore Master Fund L.P., Kingdon Family Partnership, L.P., and Kingdon Credit Master Fund L.P. and convertible note purchase agreement with two lenders, Napo has no current agreements or arrangements with respect to any such financings or collaborations, and any such financings or collaborations may result in dilution to Napo's stockholders, the imposition of debt covenants and repayment obligations or other restrictions that may harm Napo's business or the value of Napo's common stock. Napo may also seek from time to time to raise additional capital based upon favorable market conditions or strategic considerations such as potential license arrangements.

Napo's future capital requirements depend on many factors, including, but not limited to:

the scope, progress, results and costs of researching and developing Napo's current and future prescription drug product candidates;

the timing of, and the costs involved in, obtaining any regulatory approvals for Napo's current and any future products;

the number and characteristics of the products Napo pursues;

the cost of manufacturing Napo's current and future products and any products Napo successfully commercializes;

the cost of commercialization activities for Napo's prescription drug product candidates and other products, if approved, including sales, marketing and distribution costs;

the expenses needed to attract and retain skilled personnel;

Napo's ability to establish and maintain strategic collaborations, distribution or other arrangements and the financial terms of such agreements; and

the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing possible patent claims, including litigation costs and the outcome of any such litigation.

Additional funds may not be available when Napo needs them on terms that are acceptable to Napo, or at all. If adequate funds are not available to us on a timely basis, Napo may be required to delay, limit, reduce or terminate one or more of its product development programs or future commercialization efforts.

Table of Contents

Napo is substantially dependent on the success of Mytesi, and cannot be certain that drug product candidates currently in Napo's product pipeline will be approved or that Napo will be able to successfully commercialize these product candidates.

Other than Mytesi, Napo currently does not have regulatory approval for any of its prescription drug product candidates. Napo's current efforts are primarily focused on the commercial launch of Mytesi in the United States, and development efforts related to CID, institutional diarrhea, secretory diarrhea, IBS-D, pediatric general watery diarrhea, Napo's orphan drug (Channelopathies) drug product candidate, and cholera/ general watery diarrhea. Accordingly, Napo's near-term prospects, including Napo's ability to generate material product revenue, obtain any new financing if needed to fund Napo's business and operations or enter into potential strategic transactions, will depend heavily on the success of Mytesi.

Substantial time and capital resources have been previously devoted by third parties in the development of crofelemer, the active pharmaceutical ingredient, or API, in Mytesi. Crofelemer was originally developed at Shaman Pharmaceuticals, Inc., or Shaman, by certain members of Napo's management team, including Lisa A. Conte, Napo's founder and interim CEO, and Steven R. King, Ph.D., Napo's Executive Vice President, Sustainable Supply, Ethnobotanical Research and Intellectual Property and Secretary. Shaman spent significant development resources before voluntarily filing for bankruptcy in 2001 pursuant to Chapter 11 of the U.S. Bankruptcy Code. The rights to crofelemer, as well as other intellectual property rights, were subsequently acquired by Napo from Shaman in 2001 pursuant to a court approved sale of assets. Ms. Conte founded Napo in 2001 and is the current interim chief executive officer of Napo and a member of its board of directors. While at Napo, certain members of Napo's management team, including Ms. Conte and Dr. King, continued the development of crofelemer. In 2005, Napo entered into license agreements with Glenmark Pharmaceuticals Ltd., or Glenmark, and Luye Pharma Group Limited for rights to various human indications of crofelemer in certain territories as defined in the respective license agreements with these licensees. To date, Napo has not realized any royalty revenue from these licensees. Subsequently, after expending significant sums developing crofelemer, including trial design and on-going patient enrollment in the final pivotal Phase 3 trial for crofelemer for non-infectious diarrhea in adults with HIV/AIDS on antiretroviral therapy, in late 2008, Napo entered into a collaboration agreement with Salix Pharmaceuticals, Inc., or Salix, for development and commercialization rights to certain indications worldwide and certain rights in North America, Europe, and Japan, to crofelemer for human use. In May 2011, Napo sued Salix with regard to Salix's performance under the collaboration agreement. In February 2014, Salix prevailed in a jury trial, and Napo appealed the verdict. In March 2016, Napo and Salix entered into a Settlement, Termination, Asset Transfer and Transition Agreement, which settled the ongoing litigation between the parties, terminated the Salix Collaboration Agreement and transferred certain assets and inventory, including with respect to the approved drug Mytesi®, to Napo. If Napo is not successful in the development and commercialization of Mytesi, Napo's business and Napo's prospects will be harmed.

The successful development and commercialization of the prescription drug product candidates in Napo's product pipeline, if approved, will depend on a number of factors, including the following:

the successful completion of pivotal trials and toxicology studies, which may take significantly longer than Napo currently anticipate and will depend, in part, upon the satisfactory performance of third-party contractors;

Napo's ability to demonstrate to the satisfaction of the FDA and any other regulatory bodies, the safety and efficacy of its prescription drug product candidates;

Napo's ability and that of Napo's contract manufacturers to manufacture supplies of approved Napo prescription drug product candidates and to develop, validate and maintain viable

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

commercial manufacturing processes that are compliant with current good manufacturing practices, or cGMP, if required;

Napo's ability to successfully launch its prescription drug product candidates, assuming approval is obtained, whether alone or in collaboration with others;

the availability, perceived advantages, relative cost, relative safety and relative efficacy of Napo's prescription drug product candidates compared to alternative and competing treatments;

the acceptance of Napo's prescription drug product candidates as safe and effective by physicians, patients and the health community;

Napo's ability to achieve and maintain compliance with all regulatory requirements applicable to Napo's business; and

Napo's ability to obtain and enforce its intellectual property rights and obtain marketing exclusivity for Napo's prescription drug product candidates and avoid or prevail in any third-party patent interference, patent infringement claims or administrative patent proceedings initiated by third parties or the U.S. Patent and Trademark Office, or USPTO.

Many of these factors are beyond Napo's control. Accordingly, Napo may not be successful in developing or commercializing its current prescription drug product candidates or other potential products. If Napo is unsuccessful or is significantly delayed in developing and commercializing its current prescription drug product candidates or other potential products, Napo's business and prospects will be harmed and you may lose all or a portion of the value of your investment in Napo, or, if and when the merger between Napo and Jaguar becomes effective, in Jaguar's common stock.

If Napo is not successful in identifying, licensing, developing and commercializing additional product candidates and products, Napo's ability to expand its business and achieve its strategic objectives could be impaired.

Although a substantial amount of Napo's efforts are focused on the commercial launch of Mytesi and the continued development and potential approvals of its current prescription drug product candidates, a key element of Napo's strategy is to identify, develop and commercialize a portfolio of products to serve the gastrointestinal health market. Most of Napo's potential products are based on Napo's knowledge of medicinal plants. Napo's current focus is primarily on product candidates whose active pharmaceutical ingredient or botanical extract has been successfully commercialized or demonstrated to be safe and effective in human trials. In some instances, Napo may be unable to further develop these potential products because of perceived regulatory and commercial risks. Even if Napo successfully identifies potential products, Napo may still fail to yield products for development and commercialization for many reasons, including the following:

competitors may develop alternatives that render Napo's potential products obsolete;

potential products Napo seeks to develop may be covered by third-party patents or other exclusive rights;

a potential product may on further study be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria;

a potential product may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and

a potential product may not be accepted as safe and effective by physicians, patients, key opinion leaders and other decision-makers in the gastrointestinal health market.

Table of Contents

While Napo plans to develop specific formulations, methods of administration, new patents and other strategies with respect to its current potential products, Napo may be unable to prevent competitors from developing substantially similar products and bringing those products to market earlier than Napo can. If such competing products achieve regulatory approval and commercialization prior to Napo's potential products, Napo's competitive position may be impaired. If Napo fails to develop and successfully commercialize other potential products, Napo's business and future prospects may be harmed and Napo will be more vulnerable to any problems that it encounters in developing and commercializing its current potential products.

Napo may be unable to obtain, or obtain on a timely basis, regulatory approval for its existing or future prescription drug product candidates under applicable regulatory requirements, which would harm Napo's operating results.

The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of health products are subject to extensive regulation. Napo is usually not permitted to market its prescription drug product candidates in the United States until it receives approval of an NDA from the FDA. To gain approval to market a prescription drug, Napo must provide the FDA with safety and efficacy data from pivotal trials that adequately demonstrate that Napo's prescription drug product candidates are safe and effective for the intended indications. In addition, Napo must provide manufacturing data evidencing that Napo produce its product candidates in accordance with cGMP. In addition to Napo's internal activities, Napo will partially rely on contract research organizations, or CROs, and other third parties to conduct studies and for certain other development activities. The results of studies and other initial development activities, and of any previous studies conducted by Napo or third parties, may not be predictive of future results of pivotal trials or other future studies, and failure can occur at any time during the conduct of pivotal trials and other development activities by Napo or Napo's CROs. Napo's pivotal trials may fail to show the desired safety or efficacy of Napo's prescription drug product candidates despite promising initial data or the results in previous studies conducted by others, and success of a prescription drug product candidate in prior studies does not ensure success in subsequent studies. Clinical trials sometimes fail to show a benefit even for drugs that are effective because of statistical limitations in the design of the trials or other statistical anomalies. Therefore, even if Napo's studies and other development activities are completed as planned, the results may not be sufficient to obtain a required regulatory approval for a product candidate.

Regulatory authorities can delay, limit or deny approval of any of Napo's prescription drug product candidates for many reasons, including:

- if they disagree with Napo's interpretation of data from its pivotal studies or other development efforts;
- if Napo is unable to demonstrate to their satisfaction that its product candidate are safe and effective for the target indication;
- if they require additional studies or change their approval policies or regulations;
- if they do not approve of the formulation, labeling or the specifications of Napo's current and future product candidates; and
- if they fail to approve the manufacturing processes of Napo's third-party contract manufacturers.

Further, even if Napo receives a required approval, such approval may be for a more limited indication than Napo originally requested, and the regulatory authority may not approve the labeling that Napo believes is necessary or desirable for successful commercialization.

Table of Contents

Any delay or failure in obtaining any necessary regulatory approval for the intended indications of Napo's product candidates would delay or prevent commercialization of such product candidates and would harm Napo's business and its operating results.

The results of Napo's earlier studies of Mytesi may not be predictive of the results in any future clinical trials, and Napo may not be successful in its efforts to develop or commercialize line extensions of Mytesi.

Napo's product pipeline includes a number of potential indications of Mytesi, Napo's lead product. The results of Napo's studies and other initial development activities and of any previous studies conducted by us or third parties may not be predictive of results of these future clinical trials. Failure can occur at any time during the conduct of these trials and other development activities. Even if Napo's formulation studies and other development activities are completed as planned, the results may not be sufficient to pursue a particular line extension for Mytesi. Further, even if Napo obtains promising results from its clinical trials, Napo may not successfully commercialize any line extension. Because line extensions are developed for a particular market, Napo may not be able to leverage its experience from the commercial launch of Mytesi in new markets. If Napo is not successful in developing and successfully commercializing these line extension products, Napo may not be able to grow its revenue and its business may be harmed.

Development of prescription drug products is inherently expensive, time-consuming and uncertain, and any delay or discontinuance of Napo's current or future pivotal trials would harm Napo's business and prospects.

Development of prescription drug products for remains an inherently lengthy, expensive and uncertain process, and Napo's development activities may not be successful. Napo management does not know whether Napo's current or planned pivotal trials for any of its product candidates will begin or conclude on time, and trials may be delayed or discontinued for a variety of reasons, including if Napo is unable to:

address any safety concerns that arise during the course of the studies;

complete the studies due to deviations from the study protocols or the occurrence of adverse events;

add new study sites;

address any conflicts with new or existing laws or regulations; or

reach agreement on acceptable terms with study sites, which can be subject to extensive negotiation and may vary significantly among different sites.

Further, Napo may not be successful in developing new indications for Mytesi. Any delays in completing Napo's development efforts will increase Napo's costs, delay Napo's development efforts and approval process and jeopardize Napo's ability to commence product sales and generate revenue. Any of these occurrences may harm Napo's business, financial condition and prospects. In addition, factors that may cause a delay in the commencement or completion of Napo's development efforts may also ultimately lead to the denial of regulatory approval of Napo's product candidates which, as described above, would harm Napo's business and prospects.

Napo will partially rely on third parties to conduct development activities. If these third parties do not successfully carry out their contractual duties, Napo may be unable to obtain regulatory approvals or commercialize its current or future product candidates on a timely basis, or at all.

Napo will partially rely upon CROs to conduct its toxicology studies and for other development activities. These CROs are not Napo employees, and except for contractual duties and obligations, Napo has limited ability to control the amount or timing of resources that they devote to Napo

Table of Contents

programs or manage the risks associated with their activities on Napo's behalf. Napo is responsible for ensuring that each of Napo study is conducted in accordance with the development plans and trial protocols presented to regulatory authorities. Any deviations by Napo's CROs may adversely affect Napo's ability to obtain regulatory approvals, subject Napo to penalties or harm Napo's credibility with regulators. The FDA and foreign regulatory authorities also require Napo and its CROs to comply with regulations and standards, commonly referred to as good clinical practices, or GCPs, or good laboratory practices, or GLPs, for conducting, monitoring, recording and reporting the results of Napo studies to ensure that the data and results are scientifically valid and accurate.

Agreements with CROs generally allow the CROs to terminate in certain circumstances with little or no advance notice. These agreements generally will require Napo's CROs to reasonably cooperate with Napo at Napo's expense for an orderly winding down of the CROs' services under the agreements. If the CROs conducting Napo's studies do not comply with their contractual duties or obligations, or if they experience work stoppages, do not meet expected deadlines, or if the quality or accuracy of the data they obtain is compromised, Napo may need to secure new arrangements with alternative CROs, which could be difficult and costly. In such event, Napo's studies also may need to be extended, delayed or terminated as a result, or may need to be repeated. If any of the foregoing were to occur, regulatory approval, if required, and commercialization of Napo's product candidates may be delayed and Napo may be required to expend substantial additional resources.

Even if Napo obtains regulatory approval for its current prescription drug product candidates or other product candidates, these product candidates may never achieve market acceptance. Further, even if Napo is successful in commercially launching Mytesi, it may not achieve commercial success.

If Napo obtain necessary regulatory approvals for its current prescription drug product candidates or other product candidates, such products may still not achieve market acceptance and may not be commercially successful. Market acceptance of Napo's current prescription drug product candidates or other product candidates depends on a number of factors, including:

the safety of Napo's products as demonstrated in Napo's studies;

the indications for which Napo's products are approved or marketed;

the potential and perceived advantages over alternative treatments or products, including generic medicines and competing products currently prescribed by physicians, and products approved for use in humans that are used extra-label;

the acceptance by physicians and patients of Napo's products as safe and effective;

the cost in relation to alternative treatments and willingness on the part of physicians and patients to pay for Napo's products;

the prevalence and severity of any adverse side effects of Napo's products;

the relative convenience and ease of administration of Napo's products; and

the effectiveness of Napo's sales, marketing and distribution efforts.

Any failure by Napo's current any of Napo's other products to achieve market acceptance or commercial success would harm Napo's financial condition and results of operations.

Human products are subject to unanticipated post-approval safety or efficacy concerns, which may harm Napo's business and reputation.

The success of Napo's commercialization efforts will depend upon the perceived safety and effectiveness of health products, in general, and of Napo's products, in particular. Unanticipated safety or efficacy concerns can subsequently arise with respect to approved prescription drug products, such as

Table of Contents

Mytesi, which may result in product recalls or withdrawals or suspension of sales, as well as product liability and other claims. Any safety or efficacy concerns, or recalls, withdrawals or suspensions of sales of Napo's products derived from *Croton lechleri* could harm Napo's reputation and business, regardless of whether such concerns or actions are justified.

If Napo fails to retain current members of its senior management, or to identify, attract, integrate and retain additional key personnel, Napo's business will be harmed.

Napo's success depends on its continued ability to attract, retain and motivate highly qualified management and scientific personnel. Napo is highly dependent upon its senior management, particularly Lisa A. Conte, Napo's founder and interim chief executive officer. The loss of services of any of Napo's key personnel would cause a disruption in Napo's ability to develop its current or future product pipeline and commercialize its products and product candidates. Although Napo has offer letters with these key members of senior management, such agreements do not prohibit them from resigning at any time. Napo currently does not maintain "key man" life insurance on any of its senior management team. The loss of Ms. Conte or other members of Napo's current senior management could adversely affect the timing or outcomes of Napo's current and planned studies, as well as the prospects for commercializing Napo's products.

In addition, competition for qualified personnel in the gastrointestinal health field is intense, because there are a limited number of individuals who are trained or experienced in the field. Napo will need to hire additional personnel as it expands its product development and commercialization activities. Even if Napo is successful in hiring qualified individuals, as a growing organization, Napo does not have a track record for integrating and retaining individuals. If Napo is not successful in identifying, attracting, integrating or retaining qualified personnel on acceptable terms, or at all, Napo's business will be harmed.

Napo is dependent on two suppliers for the raw material used to produce the active pharmaceutical ingredient in Mytesi. The termination of either of these contracts would result in a disruption to product development and Napo's business will be harmed.

The raw material used to manufacture Mytesi is crude plant latex, or CPL, derived from the *Croton lechleri* tree, which is found in countries in South America, principally Peru. The ability of Napo's contract suppliers to harvest CPL is governed by the terms of their respective agreements with local government authorities. Although CPL is available from multiple suppliers, Napo only has contracts with two suppliers to obtain CPL and arrange the shipment to Napo's contract manufacturer. Accordingly, if Napo's contract suppliers do not or are unable to comply with the terms of Napo's respective agreements, and Napo is not able to negotiate new agreements with alternate suppliers on terms that Napo deems commercially reasonable, it may harm Napo's business and prospects. The countries from which Napo obtain CPL could change their laws and regulations regarding the export of the natural products or impose or increase taxes or duties payable by exporters of such products. Restrictions could be imposed on the harvesting of the natural products or additional requirements could be implemented for the replanting and regeneration of the raw material. Such events could have a significant impact on Napo's cost and ability to produce Mytesi and anticipated line extensions.

Napo is dependent upon third-party contract manufacturers, both for the supply of the active pharmaceutical ingredient in Mytesi as well as for the supply of finished products for commercialization.

Napo is dependent upon its contract manufacturers for the supply of the API in Mytesi. The facilities used by Napo's third-party contractors are subject to inspections, including by the FDA, and other regulators, as applicable. Napo also depends on its third-party contractors to comply with cGMP. If Napo's third-party contractors do not maintain compliance with these strict regulatory requirements, Napo and they will not be able to secure or maintain regulatory approval for their facilities, which

Table of Contents

would have an adverse effect on Napo's operations. In addition, in some cases, Napo is also dependent on its third-party contractors to produce supplies in conformity to Napo's specifications and maintain quality control and quality assurance practices and not to employ disqualified personnel. If the FDA or a comparable foreign regulatory authority does not approve the facilities of Napo's third-party contractors if so required, or if it withdraws any such approval in the future, Napo may need to find alternative manufacturing or formulation facilities, which could result in delays in Napo's ability to develop or commercialize its products. Napo and Napo's third-party contractors also may be subject to penalties and sanctions from the FDA and other regulatory authorities for any violations of applicable regulatory requirements. The USDA and the European Medicines Agency, or the EMA, employ different regulatory standards than the FDA, so Napo may require multiple manufacturing processes and facilities for the same product candidate or any approved product. Napo is also exposed to risk if its third-party contractors do not comply with the negotiated terms of Napo's agreements, or if they suffer damage or destruction to their facilities or equipment.

Napo will need to increase the size of its organization and may not successfully manage such growth.

As of December 31, 2016, Napo had 1 employee. Napo's ability to manage its growth effectively will require Napo to hire, train, retain, manage and motivate additional employees and to implement and improve Napo's operational, financial and management systems. These demands also may require the hiring of additional senior management personnel or the development of additional expertise by Napo's senior management personnel. If Napo fails to expand and enhance its operational, financial and management systems in conjunction with Napo's potential future growth, it could harm Napo's business and operating results.

If Napo's prescription drug product candidates are approved by regulatory authorities, the misuse or extra-label use of such products may harm Napo's reputation or result in financial or other damages.

If Napo's prescription drug product candidates are approved by regulatory authorities, there may be increased risk of product liability if physicians or patients attempt to use such products extra-label, including the use of Napo's products for indications for which they have not been approved. Furthermore, the use of an approved drug for indications other than those indications for which such products have been approved may not be effective, which could harm Napo's reputation and lead to an increased risk of litigation. If Napo is deemed by a governmental or regulatory agency to have engaged in the promotion of any approved product for extra-label use, such agency could request that Napo modify its training or promotional materials and practices and Napo could be subject to significant fines and penalties, and the imposition of these sanctions could also affect Napo's reputation and position within the industry. Any of these events could harm Napo's reputation and Napo's operating results.

The market for Napo's products, and the gastrointestinal health market as a whole, is uncertain and may be smaller than Napo anticipates, which could lead to lower revenue and harm Napo's operating results.

It is very difficult to estimate the commercial potential of any of Napo's products or product candidates because the gastrointestinal health market continues to evolve and it is difficult to predict the market potential for Napo's products. The market will depend on important factors such as safety and efficacy compared to other available treatments, changing standards of care, preferences of physicians, the willingness of patients to pay for such products, and the availability of competitive alternatives that may emerge either during the product development process or after commercial introduction. If the market potential for Napo's products is less than Napo anticipates due to one or more of these factors, it could negatively impact Napo's business, financial condition and results of operations. Further, the willingness of physicians and patients to pay for Napo's products may be less than Napo anticipates, and may be negatively affected by overall economic conditions.

Table of Contents

Napo may engage in future acquisitions that increase Napo's capital requirements, dilute Napo stockholders, cause Napo to incur debt or assume contingent liabilities and subject Napo to other risks.

Napo may evaluate various strategic transactions, including licensing or acquiring complementary products, technologies or businesses. Any potential acquisitions may entail numerous risks, including increased operating expenses and cash requirements, assimilation of operations and products, retention of key employees, diversion of Napo's management's attention and uncertainties in Napo's ability to maintain key business relationships of the acquired entities. In addition, if Napo undertakes acquisitions, Napo may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense. Moreover, Napo may not be able to locate suitable acquisition opportunities and this inability could impair Napo's ability to grow or obtain access to technology or products that may be important to the development of Napo's business.

Certain of the countries in which Napo plans to commercialize its products in the future are developing countries, some of which have potentially unstable political and economic climates.

Napo may commercialize its products in jurisdictions that are developing and emerging countries. This may expose Napo to the impact of political or economic upheaval, and Napo could be subject to unforeseen administrative or fiscal burdens. At present, Napo is not insured against the political and economic risks of operating in these countries. Any significant changes to the political or economic climate in any of the developing countries in which Napo operates or plans to sell products either now or in the future may have a substantial adverse effect on Napo's business, financial condition, trading performance and prospects.

Fluctuations in the exchange rate of foreign currencies could result in currency transactions losses.

As Napo expands its operations, Napo expects to be exposed to risks associated with foreign currency exchange rates. Napo anticipates that it will commercialize Mytesi and its line extensions in jurisdictions outside the United States. As a result, Napo will also be further affected by fluctuations in exchange rates in the future to the extent that sales are denominated in currencies other than U.S. dollars. Napo does not currently employ any hedging or other strategies to minimize this risk, although Napo may seek to do so in the future.

Risks Related to Napo's Intellectual Property

Obtaining and maintaining Napo's patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and Napo's patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance and annuity fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If Napo or its licensors fail to maintain the patents and patent applications covering prescription drug products and candidates, Napo's competitors might be able to enter the market, which would harm Napo's business.

Table of Contents

Third parties may initiate legal proceedings alleging that Napo is infringing their intellectual property rights, which would be costly, time-consuming and, if successfully asserted against Napo, delay or prevent the development and commercialization of Napo's current or future products and product candidates.

Napo's research, development and commercialization activities may infringe or otherwise violate or be claimed to infringe or otherwise violate patents owned or controlled by other parties. There may be patents already issued of which Napo is unaware that might be infringed by one of Napo's current or future prescription drug products or candidates or non-prescription drug products or candidates. Moreover, it is also possible that patents may exist that Napo is aware of, but that Napo does not believe are relevant to Napo's current or future prescription drug products or candidates, which could nevertheless be found to block Napo's freedom to market these products. Because patent applications can take many years to issue and may be confidential for 18 months or more after filing, there may be applications now pending of which Napo is unaware and which may later result in issued patents that may be infringed by Napo's current or future prescription drug products or candidates or non-prescription products or candidates. Napo cannot be certain that its current or future prescription drug products or candidates or non-prescription products or candidates will not infringe these or other existing or future third-party patents. In addition, third parties may obtain patents in the future and claim that use of Napo's technologies infringes upon these patents.

To the extent Napo becomes subject to future third-party claims against Napo or Napo's collaborators or licensees, Napo could incur substantial expenses and, if any such claims are successful, Napo could be liable to pay substantial damages, including treble damages and attorneys' fees if Napo or Napo's collaborators or licensees are found to be willfully infringing a third party's patents. If a patent infringement suit were brought against Napo or Napo's collaborators, Napo or they could be forced to stop or delay research, development, manufacturing or sales of the prescription drug or non-prescription product that is the subject of the suit. Even if Napo is successful in defending such claims, infringement and other intellectual property claims can be expensive and time-consuming to litigate and divert management's attention from Napo's business and operations. As a result of or in order to avoid potential patent infringement claims, Napo or Napo's collaborators or licensees may be compelled to seek a license from a third party for which Napo would be required to pay license fees or royalties, or both. Moreover, these licenses may not be available on acceptable terms, or at all. Even if Napo or Napo's collaborators or licensees were able to obtain such a license, the rights may be nonexclusive, which could allow Napo's competitors access to the same intellectual property. Any of these events could harm Napo's business and prospects.

There has been substantial litigation regarding patents and other intellectual property rights in the field of therapeutics, as well as patent challenge proceedings, including interference, derivation, *ex parte* reexamination, *inter partes* review and post-grant review proceedings before the USPTO, and oppositions and other comparable proceedings in foreign jurisdictions. In addition to possible infringement claims against Napo may be subject to third-party pre-issuance submission of prior art to the USPTO or foreign patent office, or become involved in opposition, derivation, reexamination, *inter partes* review, post grant review, or other patent office proceedings or litigation in the United States or elsewhere, challenging Napo's patent rights or the patent rights of others. For applications filed before March 16, 2013, or patents issuing from such applications, if third parties have prepared and filed patent applications in the United States that also claim technology to which Napo has rights, Napo may have to participate in interference proceedings in the USPTO to determine the priority of invention or for patent applications filed after March 16, 2013, Napo may have to participate in derivation proceedings in the USPTO to determine if Napo obtained the invention from a third party such that Napo is not entitled to a patent on the invention or a third party had obtained the invention from Napo and Napo is entitled to the patent on the invention. Because patent applications in the United States and most other countries are confidential for a period of time after filing, Napo cannot be certain that Napo was the first to either file patent applications on or invent any of the inventions

Table of Contents

claimed in Napo's patent applications. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal court necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Napo may also become involved in opposition or similar proceedings in patent offices in other jurisdictions regarding Napo's intellectual property rights with respect to Napo's prescription drug or non-prescription products and technology. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, Napo's present or future patent rights, and, could allow third parties to commercialize Napo's technology or products and compete directly with Napo, without payment to Napo, or result in Napo's inability to manufacture or commercialize products without infringing third-party patent rights.

Napo's proprietary position depends upon patents that are formulation or method-of-use patents, which do not prevent a competitor from using the same drug candidate for another use.

Composition-of-matter patents on the API in prescription drug products are generally considered to be the strongest form of intellectual property protection because such patents provide protection without regard to any particular method of use or manufacture or formulation of the API used. The composition-of-matter patents for crofelemer, the API in Mytesi, have expired.

Method-of-use patents protect the use of a product for the specified method and formulation patents cover formulations of the API or botanical extract. These types of patents do not prevent a competitor from developing or marketing an identical product for an indication that is outside the scope of the patented method or from developing a different formulation that is outside the scope of the patented formulation. Moreover, with respect to method-of-use patents, even if competitors do not actively promote their product for Napo's targeted indications or uses for which Napo may obtain patents, physicians may recommend that patients use these products extra-label, or patients may do so themselves. Although extra-label use may infringe or contribute to the infringement of method-of-use patents, the practice is common and such infringement is difficult to prevent or prosecute.

If Napo's efforts to protect intellectual property are not adequate, Napo may not be able to compete effectively in Napo's markets.

Napo intends to rely upon a combination of regulatory exclusivity periods, patents, trade secret protection, confidentiality agreements, and license agreements to protect the intellectual property related to Napo's current prescription drug product candidates and Napo's development programs.

If the breadth or strength of protection provided by any patents, patent applications or future patents Napo may own, license, or pursue with respect to any of Napo's current or future product candidates or products is threatened, it could threaten Napo's ability to commercialize any of its current or future product candidates or products. Further, if Napo encounters delays in its development efforts, the period of time during which Napo could market any of its current or future product candidates or products under any patent protection Napo obtains would be reduced. In addition, with respect to patent applications that Napo files on its technology, there is a risk that US or foreign patent offices would not allow and issue patents from the patent applications or the patents that do issue are limited in scope and would not provide sufficient protection to keep competition off of the market during the term of patents that issue from the patent applications.

Given the amount of time required for the development, testing and regulatory review of new product candidates or products, patents protecting such candidates might expire before or shortly after such product candidates or products are commercialized. Napo has elected to extend the term of US 7,341,744 under 35 U.S.C. 156, and the United States Patent and Trademark Office has issued a Notice of Final Determination that the patent term extension for US 7,341,744 is 1075 days. Based

Table of Contents

upon the January 11, 2018 expiration date, the patent would be extended to June 2021, to account for regulatory delay in obtaining human marketing approval for crofelemer. The United States Patent and Trademark Office (USPTO) has not yet issued a Patent Term Extension Certificate. The USPTO issued on December 16, 2006, a notice of recalculation of the patent term adjustment for US 7,341,744 for 842 days, for an expiration date of February 5, 2019; however, the USPTO has not issued a certificate of correction to officially correct the patent term adjustment accorded to this patent. In addition, on February 20, 2017, Napo filed a Request for Reconsideration of the patent term adjustment of US 7,341,744, requesting recalculation resulting in 1032 days or, alternatively, 980 days of patent term adjustment. Napo has requested that the USPTO not issue the final Patent Term Extension certificate until final resolution of the number of days of patent term adjustment accorded to US 7,341,744. There is no guarantee that the USPTO will grant the request for reconsideration. In addition, the applicable authorities, including the USPTO and the FDA, and any equivalent regulatory authority in other countries, may not agree with Napo's assessment of whether such extensions are available, and may refuse to grant extensions to patents, or may grant more limited extensions than requested. If this occurs, Napo's competitors may take advantage of Napo's investment in development and trials by referencing Napo's clinical and preclinical data and launch their product earlier than might otherwise be the case.

Even where laws provide protection or Napo is able to obtain patents, costly and time-consuming litigation may be necessary to enforce and determine the scope of Napo's proprietary rights, and the outcome of such litigation would be uncertain. Moreover, any actions Napo may bring to enforce Napo's intellectual property against Napo's competitors could provoke them to bring counterclaims against Napo, and some of Napo's competitors have substantially greater intellectual property portfolios than Napo has.

If Napo is unable to prevent disclosure of its trade secrets or other confidential information to third parties, Napo's competitive position may be impaired.

Napo also relies on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or for which Napo has not filed patent applications, processes for which patents are difficult to obtain or enforce and other elements of Napo's product development processes that involve proprietary know-how, information or technology that is not covered by patents. Although Napo requires all of its employees to assign their inventions to Napo, and endeavors to execute confidentiality agreements with all Napo employees, consultants, advisors and any third parties who have access to Napo's proprietary know-how, information or technology, Napo cannot be certain that it has executed such agreements with all parties who may have helped to develop Napo's intellectual property or had access to Napo's proprietary information, or that Napo's agreements will not be breached. Napo cannot guarantee that Napo's trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to Napo's trade secrets or independently develop substantially equivalent information and techniques. If Napo is unable to prevent disclosure of Napo's intellectual property to third parties, Napo may not be able to maintain a competitive advantage in its market, which would harm Napo's business.

Any disclosure to or misappropriation by third parties of Napo's confidential proprietary information could enable competitors to quickly duplicate or surpass Napo's technological achievements, and erode Napo's competitive position in Napo's market.

Napo may be involved in lawsuits to protect or enforce any current or future patents issued to Napo, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe upon any patents that have issued or may issue to Napo, or any patents that Napo has licensed or may license. To counter infringement or unauthorized use of any patents Napo may obtain, Napo may be required to file infringement claims or request that Napo's licensor file

Table of Contents

an infringement claim, which can be expensive and time-consuming to litigate. In addition, if Napo or one of its future collaborators were to initiate legal proceedings against a third party to enforce a patent covering Napo's current product candidates, or one of Napo's future products, the defendant could counterclaim that the patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement or lack of statutory subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant material information from the USPTO, or made a materially misleading statement, during prosecution. Third parties may also raise similar validity claims before the USPTO in post-grant proceedings such as *ex parte* reexaminations, *inter partes* review, or post-grant review, or oppositions or similar proceedings outside the United States, in parallel with litigation or even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, Napo would lose at least part, and perhaps all, of any current or future patent protection on Napo's current or future products or product candidates. Such a loss of patent protection could harm Napo's business. Napo cannot be certain that there is no invalidating prior art, of which Napo and the patent examiner were unaware during prosecution. For the patents and patent applications that Napo has licensed, Napo may have limited or no right to participate in the defense of any licensed patents against challenge by a third party.

Litigation proceedings may fail and, even if successful, may result in substantial costs and distract Napo's management and other employees. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of Napo's confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be unsuccessful, it could have an adverse effect on the price of Napo's common stock. Finally, Napo may not be able to prevent, alone or with the support of Napo's licensors, misappropriation of Napo's trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing Napo's ability to protect its products.

As is the case with other health product companies, Napo's success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the health industry involves both technological and legal complexity. Therefore, obtaining and enforcing patents is costly, time-consuming and inherently uncertain. In addition, the United States has recently enacted and implemented wide-ranging patent reform legislation. The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to Napo's ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken Napo's ability to obtain new patents or to enforce patents that Napo has licensed or that Napo might obtain in the future.

Table of Contents

Napo may not be able to protect its intellectual property rights throughout the world, which could impair Napo's business.

Filing, prosecuting and defending patents on prescription drug products and product candidates and non-prescription products and product candidates throughout the world would be prohibitively expensive. Competitors may use Napo's technologies in jurisdictions where Napo has not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where Napo may obtain patent protection, but where patent enforcement is not as strong as that in the United States. These products may compete with Napo's products in jurisdictions where Napo does not have any issued or licensed patents and any future patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, which could make it difficult for Napo to stop the infringement of Napo's current or future patents, if any, or patents Napo has in licensed, or marketing of competing products in violation of Napo's proprietary rights generally. Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, Napo may encounter significant problems in protecting and defending Napo's intellectual property both in the United States and abroad. Proceedings to enforce Napo's future patent rights, if any, in foreign jurisdictions could result in substantial cost and divert Napo's efforts and attention from other aspects of Napo's business.

Napo's business could be harmed if Napo fails to obtain certain registered trademarks in the United States or in other countries.

During trademark registration proceedings, Napo may receive rejections of its trademark applications. If so, Napo will have an opportunity to respond, but Napo may be unable to overcome such rejections. In addition, the USPTO and comparable agencies in many foreign jurisdictions may permit third parties to oppose pending trademark applications and to seek to cancel registered trademarks. If opposition or cancellation proceedings are filed against any of Napo's trademark applications or any registered trademarks, Napo's trademarks may not survive such proceedings. Moreover, any name Napo proposes to use with Napo's prescription drug product candidates in the United States, must be approved by the FDA, regardless of whether Napo has registered or applied to register as a trademark. The FDA typically conducts a review of proposed prescription drug product names, including an evaluation of potential for confusion with other product names. If the FDA objects to any of Napo's proposed proprietary product names, Napo may be required to expend significant additional resources in an effort to identify a suitable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA.

Napo may be subject to claims that Napo's employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

Napo has received confidential and proprietary information from third parties. In addition, Napo employs individuals who were previously employed at other biotechnology, pharmaceutical or health companies. Napo may be subject to claims that Napo or Napo's employees, consultants or independent contractors have inadvertently or otherwise improperly used or disclosed confidential information of these third parties or Napo's employees' former employers. Litigation may be necessary to defend against any such claims. Even if Napo is successful in defending against any such claims, such litigation could result in substantial cost and be a distraction to Napo's management and employees.

Table of Contents

Risks Related to Government Regulation of Napo's Business

Even if Napo receives any required regulatory approvals for Napo's current or future prescription drug product candidates and non-prescription products, Napo will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense.

If the FDA or any other regulatory body approves any of Napo's current or future prescription drug product candidates, or if necessary, Napo's non-prescription products, the manufacturing processes, clinical development, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product may be subject to extensive and ongoing regulatory requirements. These requirements could include, but are not limited to, submissions of efficacy and safety and other post-marketing information and reports, establishment registration, and product listing, compliance with new rules promulgated under the FSMA, as well as continued compliance with cGMP, GLP and GCP for any studies that Napo conducts post-approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with Napo's contract manufacturers or manufacturing processes, or failure to comply with regulatory requirements, are reportable events to the FDA and may result in, among other things:

restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, revised labeling, or voluntary or involuntary product recalls;

additional clinical studies fines, warning letters or holds on studies;

refusal by the FDA, or other regulators to approve pending applications or supplements to approved applications filed by Napo or Napo's strategic collaborators related to the unknown problems, or suspension or revocation of the problematic product's license approvals;

product seizure or detention, or refusal to permit the import or export of products; and

injunctions or the imposition of civil or criminal penalties.

The FDA or other regulatory agency's policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of Napo's product candidates or require certain changes to the labeling or additional clinical work concerning safety and efficacy of the product candidates. Napo cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If Napo is slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if Napo is not able to maintain regulatory compliance, Napo may lose any marketing approval that Napo may have obtained and Napo may not achieve or sustain profitability, which would harm Napo's business. In addition, failure to comply with these regulatory requirements could result in significant penalties.

In addition, from time to time, Napo may enter into consulting and other financial arrangements with physicians, who prescribe or recommend Napo's products, once approved. As a result, Napo may be subject to state, federal and foreign healthcare laws, including but not limited to anti-kickback laws. If Napo's financial relationships with physicians are found to be in violation of such laws that apply to Napo, Napo may be subject to penalties.

The issuance by the FDA of protocol concurrences for Napo's pivotal studies does not guarantee ultimate approval of Napo's NDA.

Napo intends to seek protocol concurrences from the FDA for future pivotal trials that Napo initiates. A pivotal study protocol is submitted to the FDA by a drug sponsor for purposes of obtaining FDA review of the protocol. Prior FDA review of the protocol for a pivotal study makes it more likely that the study will generate information the sponsor needs to demonstrate whether the drug is safe and

Table of Contents

effective for its intended use. It creates an expectation by the sponsor that the FDA should not later alter its perspectives on these issues unless public concerns appear that were not recognized at the time of protocol assessment. Even if the FDA issues a protocol concurrence, ultimate approval of an NDA by the FDA is not guaranteed because a final determination that the agreed-upon protocol satisfies a specific objective, such as the demonstration of efficacy, or supports an approval decision, will be based on a complete review of all the data submitted to the FDA. Even if Napo were to obtain protocol concurrence such concurrence does not guarantee that the results of the study will support a particular finding or approval of the new drug.

Any of Napo's current or future prescription drug product candidates or non-prescription products may cause or contribute to adverse medical events that Napo would be required to report to regulatory authorities and, if Napo fails to do so, Napo could be subject to sanctions that would harm Napo's business.

If Napo is successful in commercializing any of Napo's current or future prescription drug product candidates or non-prescription products, certain regulatory authorities will require that Napo report certain information about adverse medical events if those products may have caused or contributed to those adverse events. The timing of Napo's obligation to report would be triggered by the date Napo becomes aware of the adverse event as well as the nature of the event. Napo may fail to report adverse events Napo becomes aware of within the prescribed timeframe. Napo may also fail to appreciate that Napo has become aware of a reportable adverse event, especially if it is not reported to Napo as an adverse event or if it is an adverse event that is unexpected or removed in time from the use of Napo's products. If Napo fails to comply with Napo's reporting obligations, the regulatory authorities could take action including, but not limited to, criminal prosecution, seizure of Napo's products, facility inspections, removal of Napo's products from the market, recalls of certain lots or batches, or cause a delay in approval or clearance of future products.

Legislative or regulatory reforms make it more difficult and costly for Napo to obtain regulatory clearance or approval of any of Napo's current or future product candidates and to produce, market, and distribute Napo's products after clearance or approval is obtained.

From time to time, legislation is drafted and introduced in the U.S. Congress or other jurisdictions in which Napo intends to operate that could significantly change the statutory provisions governing the testing, regulatory clearance or approval, manufacture, and marketing of regulated products. In addition, the FDA's regulations and guidance are often revised or reinterpreted by the FDA and such other regulators in ways that may significantly affect Napo's business and Napo's products and product candidates. Similar changes in laws or regulations can occur in other countries. Any new regulations or revisions or reinterpretations of existing regulations in the United States or in other countries may impose additional costs or lengthen review times of any of Napo's current or future products and product candidates. Napo cannot determine what effect changes in regulations, statutes, legal interpretation or policies, when and if promulgated, enacted or adopted may have on Napo's business in the future. Such changes could, among other things, require:

changes to manufacturing methods;

additional clinical trials or testing;

new requirements related to approval to enter the market;

recall, replacement, or discontinuance of certain products; and

additional record keeping or the development of certain regulatory required hazard identification plans.

Table of Contents

Each of these would likely entail substantial time and cost and could harm Napo's financial results. In addition, delays in receipt of or failure to receive regulatory clearances or approvals for any future products would harm Napo's business, financial condition, and results of operations.

Risks Related to the Combined Company if the Merger is Completed

The failure to integrate successfully the businesses of Jaguar and Napo in the expected timeframe would adversely affect the combined company's future results following the completion of the merger.

The success of the merger will depend, in large part, on the ability of the combined company following the completion of the merger to realize the anticipated benefits from combining the businesses of Jaguar and Napo. To realize these anticipated benefits, the combined company must successfully integrate the businesses of Jaguar and Napo. This integration will be complex and time-consuming.

The failure to integrate successfully and to manage successfully the challenges presented by the integration process may result in the combined company's failure to achieve some or all of the anticipated benefits of the merger.

Potential difficulties that may be encountered in the integration process include the following:

lost sales and customers as a result of customers of either of the two companies deciding not to do business with the combined company;

complexities associated with managing the larger, more complex, combined business;

integrating personnel from the two companies;

potential unknown liabilities and unforeseen expenses, delays or regulatory conditions associated with the merger; and

performance shortfalls at one or both of the companies as a result of the diversion of management's attention caused by completing the merger and integrating the companies' operations.

The combined company's future results will suffer if the combined company does not effectively manage its expanded operations following the merger.

Following the merger, the size of the combined company's business will be significantly larger than the current businesses of Jaguar and Napo. The combined company's future success depends, in part, upon its ability to manage this expanded business, which will pose substantial challenges for the combined company's management, including challenges related to the management and monitoring of new operations and associated increased costs and complexity. Neither Jaguar nor Napo can assure you that the combined company will be successful or that the combined company will realize the expected operating efficiencies, annual net operating synergies, revenue enhancements and other benefits currently anticipated to result from the merger.

The loss of key personnel could have a material adverse effect on the combined company's business, financial condition or results of operations.

The success of the merger will depend in part on the combined company's ability to retain key Jaguar and Napo employees who continue employment with the combined company after the merger is completed. It is possible that these employees might decide not to remain with the combined company after the merger is completed. If these key employees terminate their employment, the combined company's business activities might be adversely affected, management's attention might be diverted from integrating Jaguar and Napo to recruiting suitable replacements and the combined company's

Table of Contents

business, financial condition or results of operations could be adversely affected. In addition, the combined company might not be able to locate suitable replacements for any such key employees who leave the combined company or offer employment to potential replacements on reasonable terms.

The success of the combined company will also depend on relationships with third parties and pre-existing customers of Jaguar and Napo, which relationships may be affected by customer preferences or public attitudes about the merger. Any adverse changes in these relationships could adversely affect the combined company's business, financial condition or results of operations.

The combined company's success will be dependent on the ability to maintain and renew business relationships, including relationships with pre-existing customers of both Jaguar and Napo, and to establish new business relationships. There can be no assurance that the business of the combined company will be able to maintain pre-existing customer contracts and other business relationships, or enter into or maintain new customer contracts and other business relationships, on acceptable terms, if at all. The failure to maintain important business relationships could have a material adverse effect on the business, financial condition or results of operations of the combined company.

The combined company will incur significant transaction and merger-related costs in connection with the merger.

Jaguar and Napo expect to incur significant costs associated with completing the merger and combining the operations of the two companies. Although the exact amount of these costs is not yet known, Jaguar and Napo estimate that these costs will be approximately \$[•] in the aggregate. In addition, there may be unanticipated costs associated with the integration. Although Jaguar and Napo expect that the elimination of duplicative costs and other efficiencies may offset incremental transaction and merger-related costs over time, these benefits may not be achieved in the near term or at all.

The combined company will record goodwill that could become impaired and adversely affect the combined company's operating results.

The merger will be accounted for as an acquisition by Jaguar in accordance with accounting principles generally accepted in the United States. Under the acquisition method of accounting, the assets and liabilities of Napo will be recorded, as of completion, at their respective fair values and added to those of Jaguar. The reported financial condition and results of operations of Jaguar issued after completion of the merger will reflect Napo balances and results after completion of the merger, but will not be restated retroactively to reflect the historical financial position or results of operations of Napo for periods prior to the merger. Following completion of the merger, the earnings of the combined company will reflect acquisition accounting adjustments. See "Unaudited Pro Forma Combined Condensed Financial Statements" beginning on page 269.

Under the acquisition method of accounting, the total purchase price will be allocated to Napo's tangible assets and liabilities and identifiable intangible assets based on their fair values as of the date of completion of the merger. The excess of the purchase price over those fair values will be recorded as goodwill. Jaguar and Napo expect that the merger will result in the creation of goodwill based upon the application of the acquisition method of accounting. To the extent the value of goodwill or intangibles becomes impaired, the combined company may be required to incur material charges relating to such impairment. Such a potential impairment charge could have a material impact on the combined company's operating results.

Jaguar's ability to utilize net operating loss carryforwards and certain other tax attributes may be limited.

Federal and state income tax laws impose restrictions on the utilization of net operating loss (sometimes referred to as NOL) and tax credit carryforwards in the event that an "ownership change"

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

occurs for tax purposes, as defined by Section 382 of the Code. In general, an ownership change occurs when stockholders owning 5% or more of a "loss corporation" (a corporation entitled to use NOL or other loss carryovers) have increased their ownership of stock in such corporation by more than 50 percentage points during any three-year period. The annual base limitation under Section 382 of the Code is calculated by multiplying the loss corporation's value at the time of the ownership change by the greater of the long-term tax-exempt rate determined by the IRS in the month of the ownership change or the two preceding months.

As of December 31, 2016, Jaguar and Napo had \$24.5 million and \$85.4 million, respectively, of NOLs for federal income tax purposes that may be currently limited in their annual use. As a result of the merger, it is possible that either or both Jaguar and Napo will be deemed to have undergone an "ownership change" for purposes of Section 382 of the Code. Accordingly, the combined company's ability to utilize Jaguar's and Napo's net operating loss carryforwards may be substantially limited. These limitations could in turn result in increased future tax payments for the combined company, which could have a material adverse effect on the business, financial condition or results of operations of the combined company.

The merger may not be accretive, and may be dilutive, to Jaguar's earnings per share, which may negatively affect the market price of Jaguar common stock.

Although the merger is expected to be accretive to earnings per share, the merger may not be accretive, and may be dilutive, to Jaguar's earnings per share. The expectation that the merger will be accretive is based on preliminary estimates that may materially change. In addition, future events and conditions could decrease or delay any accretion, result in dilution or cause greater dilution than may be expected, including:

adverse changes in market conditions;

production levels;

operating results;

competitive conditions;

laws and regulations affecting the animal health industry;

capital expenditure obligations; and

general economic conditions.

Any dilution of, or decrease or delay of any accretion to, Jaguar's earnings per share could cause the price of Jaguar's common stock to decline.

Business issues currently faced by one company may be imputed to the operations of the other company or the combined company.

To the extent that either Jaguar or Napo currently has or is perceived by customers to have operational challenges, those challenges may raise concerns by existing customers of the other company following the merger which may limit or impede Jaguar's future ability to maintain relationships with those customers.

Resales of shares of Jaguar common stock following the merger and additional obligations to issue shares of Jaguar common stock may cause the market price of Jaguar common stock to decrease.

As of March 31, 2017, Jaguar had 14,424,128 shares of common stock issued and outstanding and approximately 2,520,498 shares of common stock subject to outstanding options, warrants and other rights to purchase or acquire its shares. Jaguar currently estimates that it will issue up to an aggregate

Table of Contents

of approximately 69,299,346 shares of Jaguar common stock and non-voting common stock upon the closing of the merger and the related Napo debt settlement, on a fully diluted basis assuming the exercise or conversion of all outstanding options and warrants other than those options and warrants exercisable or convertible for approximately 300,000 shares of Jaguar common stock with an exercise/conversion price of \$5.00 or more. Of these shares, (x) up to approximately 19,900,202 shares of Jaguar common stock and (y) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, additional shares of the Jaguar common stock (equal to 50% of the unsold Tranche A shares), which will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units (sometimes referred to herein collectively as the Merger Shares), will be issuable upon the vesting of the contingent rights, which shares are registered for resale pursuant to this joint proxy statement/prospectus.

The issuance of and subsequent resale of these new shares of Jaguar common stock could have the effect of depressing the market price for shares of Jaguar common stock. In addition, the issuance of Jaguar common stock upon exercise of outstanding Jaguar options and warrants could also have the effect of depressing the market price for shares of Jaguar common stock.

The combined company will assume Napo's obligations under the Napo/Salix Settlement Agreement, including the payment of fees to Salix in connection with the licensing of certain Napo assets and the sale or transfer of Napo assets in any subsequent transaction.

Pursuant to the settlement, termination, asset transfer and transition agreement, or the Napo/Salix Settlement Agreement, between Napo and Salix Pharmaceuticals, Inc., or Salix, Jaguar will become subject to Napo's obligations under the Napo/Salix Settlement Agreement upon consummation of the merger, including the obligation to make payments to Salix consisting of a percentage of any consideration (i) received by the combined company or any of its affiliates from licensing certain assets specified in the Napo/Salix Settlement Agreement and/or (ii) received by the combined company in connection with the merger, consolidation, sale or similar transaction involving the combined company that is attributable to Napo and its affiliates. These payments will reduce any future revenues realized by the combined company from licensing or selling Napo's assets.

In addition, the combined company will not be able to incur any secured indebtedness from any creditor without entering into an intercreditor agreement with such creditor and Salix for purposes of protecting the relative priority of Salix's rights to payment and collection of amounts payable to Salix as described above. This restriction may hinder the combined company's ability to obtain, or increase the costs of obtaining, secured financing in the future.

Table of Contents

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

The statements in this joint proxy statement/prospectus and the documents incorporated by reference herein that are not historical statements, including statements regarding the expected timetable for completing the merger, benefits and synergies of the merger, future opportunities for the combined company and products, future financial performance and any other statements regarding Jaguar's and Napo's future expectations, beliefs, plans, objectives, financial conditions, assumptions or future events or performance that are not historical facts, are forward-looking statements within the meaning of the federal securities laws. These statements are subject to numerous risks and uncertainties, many of which are beyond the companies' control, which could cause actual results to differ materially from the results expressed or implied by the statements. These risks and uncertainties include, but are not limited to: failure to obtain the required votes of Jaguar's or Napo's stockholders; the timing to consummate the merger; the risk that conditions to closing of the merger may not be satisfied or the closing of the merger may otherwise not occur; the risk that a regulatory approval that may be required for the merger is not obtained or is obtained subject to conditions that are not anticipated; the diversion of management time on transaction-related issues; the ultimate timing, outcome and results of integrating the operations of Jaguar and Napo; the effects of the business combination of Jaguar and Napo, including the combined company's future financial condition, results of operations, strategy and plans; expected synergies and other benefits from the merger and the ability of Jaguar to realize such synergies and other benefits; expectations regarding regulatory approval of the transaction; the possibility that Jaguar and Napo may not be able to maintain relationships with their employees, suppliers or customers as a result of the uncertainty surrounding the merger; direct or indirect effects on the combined company's business, financial condition or liquidity resulting from a change in its credit rating or the credit ratings of its counterparties or competitors; actions by third parties, including governmental agencies; compliance with laws related to income taxes and assumptions regarding the generation of future taxable income; maintaining a highly skilled workforce; and integration of acquired businesses and operations of joint ventures.

Any forward-looking statements should be considered in light of such important factors. Jaguar and Napo undertake no obligation to revise or update publicly any forward-looking statements for any reason. Readers are cautioned not to place undue reliance on any forward-looking statement, which speaks only as of the date on which such statement is made or in the case of documents incorporated by reference, as of the date of the document incorporated by reference.

All subsequent written and oral forward-looking statements concerning the merger or other matters addressed in this joint proxy statement/prospectus and attributable to Jaguar, Napo or any person acting on their behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this joint proxy statement/prospectus.

Table of Contents

JAGUAR BUSINESS

Overview

Jaguar is an animal health company focused on developing and commercializing first-in-class gastrointestinal products for companion and production animals, foals, and high value horses. Jaguar was founded in San Francisco, California as a Delaware corporation on June 6, 2013. Napo formed Jaguar to develop and commercialize animal health products. Effective as of December 31, 2013, Jaguar was a wholly-owned subsidiary of Napo, and until May 13, 2015, Jaguar was a majority-owned subsidiary of Napo. Since inception, Jaguar has been primarily focused on designing and conducting studies of Canalevia to treat various types of diarrhea in dogs and of Neonorm to help retain fluid in calves and to function as an anti-diarrheal in foals. A portion of Jaguar's activities has also been focused on other efforts associated with being a recently formed company, including securing necessary intellectual property, recruiting management and key employees, and financing activities.

Canalevia is Jaguar's lead prescription drug product candidate. Jaguar achieved statistically significant results in a multicenter canine proof-of-concept study completed in February 2015, supporting the conclusion that Canalevia treatment is superior to placebo in alleviating clinical signs associated with secretory, or watery, diarrhea in dogs. As Jaguar announced in December 2015, the pivotal clinical field study to evaluate the safety and effectiveness of Canalevia for acute diarrhea in dogs is underway. Two-hundred dogs were enrolled in the Canalevia pivotal study, which completed enrollment in January 2017. Jaguar has received Minor Use in a Minor Species (MUMS) designation for Canalevia for Chemotherapy-Induced Diarrhea (CID) in dogs, and Jaguar is pursuing MUMS designation for Canalevia for the indication of exercise-induced diarrhea (EID) in dogs.

Canalevia is a canine-specific formulation of crofelemer, an active pharmaceutical ingredient isolated and purified from the *Croton lechleri* tree, which is sustainably harvested. A human-specific formulation of crofelemer, Mytesi (formerly known as Fulyzaq), was approved by the FDA in 2012 for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy. Members of Jaguar's management team developed crofelemer while at Napo. Canalevia utilizes the same mechanism of action as Mytesi, as do Neonorm Foal and Neonorm Calf Jaguar's lead non-prescription products. Each of these products normalizes ion and water flow into the intestinal lumen. Because this is a physiological pathway generally present in mammals, Jaguar has validated its low risk strategy of extending the clinical success in humans to preweaned dairy calves, foals, piglets, and dogs; and Jaguar believes these clinical benefits will continue to be confirmed in other mammalian species.

Neonorm is a standardized botanical extract derived from the *Croton lechleri* tree. Jaguar launched Neonorm Calf in the United States at the end of 2014 for preweaned dairy calves. The reception among users of Neonorm Calf and Neonorm Foal, the anti-diarrheal product Jaguar launched for newborn horses in early 2016 has been quite positive. The clinically-proven performance of Neonorm Foal, in combination with Jaguar's heightened understanding of market needs within the global equine space, is driving Jaguar's increased focus on developing a full suite of equine products to support and improve gastrointestinal health in foals and adult horses. Gastrointestinal conditions such as acute diarrhea, ulcers and diarrhea associated with acute colitis can be extremely debilitating for horses, and present a significant economic and emotional burden for veterinarians and owners around the world. Equilevia (formerly referred to as SB-300) is Jaguar's prescription drug product candidate for treatment of gastrointestinal ulcers in horses. Equilevia is a pharmaceutical formulation of a standardized botanical extract.

As Jaguar announced on March 28, 2017, it has entered an exclusive, 60-day evaluation period, commencing April 3, 2017, with a leading multinational animal health pharmaceutical firm regarding Equilevia. Jaguar completed a dose determination study of the target commercial paste formulation of Equilevia in the fourth quarter of last year. All data from the dose determination study will remain

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

confidential during the 60-day evaluation period. The partnering strategy of both Jaguar and Napo is focused on bringing novel gastrointestinal medicines from the two company's extremely broad pipelines to market in a productive and efficient manner, and Jaguar believes entering a possible collaboration with a leading animal health company focused on equine athletes would be an important component of this strategy.

As Jaguar announced on January 31, 2017, Jaguar and Elanco US Inc., a subsidiary of Eli Lilly and Company, have signed an agreement to license, develop, co-promote and commercialize Canalevia for treatment of acute diarrhea in dogs. The agreement grants Elanco exclusive global rights to Canalevia for use in companion animals. Jaguar and Elanco will collaborate on the global development of the product and on its commercialization in the US. Under the terms of the agreement, Jaguar has retained the commercial responsibility for the CID indication of Canalevia in dogs. Jaguar plans to market Canalevia for CID in 2017, if approved, and for acute diarrhea in early 2018, if approved, through Jaguar's focused commercial efforts and to complement its relationships with distribution partners.

As Jaguar announced in December 2016, Jaguar has signed a distribution agreement with Henry Schein, Inc., the world's largest provider of health care products and services to office-based dental, animal health and medical practitioners, for exclusive distribution of Neonorm Foal product to all segments of the U.S. equine market. Henry Schein's animal health business, Dublin, Ohio-based Henry Schein Animal Health, employs approximately 900 team members and had 2015 net sales of \$2.9 billion. The agreement became effective on December 9, 2016, and, subject to provisions specified in the agreement, shall continue in force for an initial period of one year. Thereafter, unless either party notifies the other of its intent not to renew the term of the agreement at least 30 days prior to the end of the then current term, the term shall be automatically renewed upon expiration for successive renewal terms of one year.

In July 2016 Jaguar released data from two China-based studies sponsored by Fresno, California-based Integrated Animal Nutrition and Health Inc. showing remarkable resolution of diarrhea and cure of piglets afflicted with diarrhea following treatment with a *Croton lechleri* botanical extract administered in water. As Jaguar announced in September 2016, Jaguar has signed an exclusive supply and distribution agreement for this botanical extract with Integrated Animal Nutrition and Health Inc. for dairy cattle and pigs in the Chinese marketplace. According to Index Mundi, swine production is projected to reach 672.5 million head in 2017 in China, where pork is still the main protein source for many consumers. According to New Zealand-based NZX Agri, in 2017 there will be 7 million cows "in milk" (lactating cows) in China. With the world's largest population, China has been experiencing an increase in demand for dairy products as a result of sharply increasing income levels, fast-changing food habits, the desire of parents to feed their babies high-protein formula, and the loosening in 2015 of China's longstanding one-child policy, among other factors. Integrated Animal Nutrition and Health, Inc. has minimum purchase requirements of the botanical extract to maintain their exclusivity.

As Jaguar announced on February 2, 2017, Jaguar has begun entry into the organic market with Neonorm Calf, following listing of Neonorm Calf with an organization that evaluates livestock products in accordance with the U.S. Department of Agriculture (USDA) National Organic Standards on behalf of specified producers in New York state. Additionally, Jaguar is applying to have Neonorm Calf listed by the Organic Materials Review Institute (OMRI). OMRI is an international nonprofit organization that determines which input products are allowed for use in organic production and processing. OMRI Listed® products are allowed for use in certified organic operations under the USDA National Organic Program. According to the Organic Trade Association's (OTA) 2016 Organic Industry Survey, the U.S. organic industry posted new records in 2015, with total organic product sales hitting a new benchmark of \$43.3 billion, up 11% from the previous year's record level and outpacing the overall food market's growth rate of 3%. According to OTA, dairy, the second biggest organic food category, accounted for \$6.0 billion in sales, an increase of over 10%, and dairy accounts for 15% of total organic food sales.

Table of Contents

Organic livestock production plays a vital role in support of a sustainable and safe farm and food system, both in the U.S. and internationally. According to a report published by Allied Market Research, the global market for organic dairy food and drinks – organic milk, yogurt, cheese, and others – is expected to grow at a compound annual growth rate of 14.25% from 2016 to reach \$36.7 billion by 2022 from \$14.5 billion in 2015. Jaguar believes Neonorm Calf will qualify as allowable for use on certified organic dairies throughout the U.S., and Jaguar is currently working to obtain additional required listings.

Jaguar has an exclusive worldwide license to Napo's intellectual property rights and technology related to Jaguar products and product candidates, including rights to Napo's library of over 2,300 medicinal plants, for all veterinary treatment uses and indications for all species of animals. This includes rights to Neonorm, Canalevia, and other distinct prescription drug product candidates in Jaguar's pipeline along with the corresponding existing preclinical and clinical data packages. Jaguar also recently expanded its intellectual property portfolio to include combinations of Jaguar's proprietary anti-secretory product lines, Canalevia and Neonorm, with the non-absorbed antibiotic, rifaximin, for gastrointestinal indications in all animals.

Jaguar's management team has significant experience in gastrointestinal and animal health product development. This experience includes the development of crofelemer for human use, from discovery and preclinical and clinical toxicity studies, including the existing animal studies to be used for Canalevia regulatory approvals, through human clinical development. Jaguar's team also includes individuals who have prior animal health experience at major pharmaceutical companies.

Product Pipeline

Jaguar is developing a pipeline of prescription drug product candidates and non-prescription (non-drug) products to address unmet needs in animal health. Jaguar's pipeline currently includes prescription drug product candidates for nine indications across multiple species, and non-prescription products targeting seven species.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Prescription Drug Product Candidates

Product Candidates	Species	Indication	Recent Developments	Anticipated Near-Term Milestones
Canalevia	Dogs	CID	Completed safety study with commercial formulation in June 2015	Initiate pilot study for TKI associated diarrhea management
				Commercial launch in 2017
	Dogs	Acute diarrhea	Concurred protocol	Pivotal field trial completes enrollment
			Initiated pivotal field trial to evaluate safety and effectiveness	File all major sections of NADA in mid-2017
			Entered into License, Development, Co-Promotion and Commercialization Agreement with Elanco in January 2017	Commercial launch in early 2018
			Development, co-promote and distribution partner	
Species-specific formulations of crofelemer	Horses	Diarrhea associated with acute colitis		Initiate development of second generation chew formulation for chronic administration
Equilevia	Horses	Ulcers	Completed pilot safety study in December 2015	Seek MUMS designation and product development 2017
			Proof-of-concept safety and effectiveness results in January 2016	Product development meeting with FDA in first half of 2017
		Product development meeting with FDA in first half 2016	Minimum dose results, commercial dose selection, and commence pivotal field trial	
		Initiated dose confirmation study		
	Cats	Acute diarrhea	Positive racing results	

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

			INAD opened in 2014	Initiate safety and proof-of-concept
Virend (topical)	Cats	Herpes virus	Entered into License, Development, Co-Promotion and Commercialization Agreement with Elanco in January 2017	
Species-specific formulations of NP-500	Dogs	Obesity-related metabolic dysfunction	INAD opened in 2014	Initiate safety and proof-of-concept
	Horses	Metabolic syndrome	INAD opened in 2014	
	Cats	Type II diabetes	INAD opened in 2014	
			INAD opened in 2014	

Table of Contents**Non-Prescription Products**

Products	Species	Use	Recent Developments	Anticipated Near-Term Milestones
Neonorm Calf	Dairy & beef calves	Helps proactively retain fluids in calves aiding the animals in avoiding debilitating, dangerous levels of dehydration	Field study supports beneficial effect on prewean weight gain Positive prophylactic results Distribution deal China	Launch second generation formulation for administration in liquid, prophylaxis Commercial launch in South America Business development activities
Species-specific formulations of Neonorm	Horse foals	Anti-diarrheal for newborn horses	Completed proof-of-concept study in November 2015 Soft-launched product in December 2015	Evaluation of Neonorm Horse product
	Piglets	Normalize fecal formation in piglets	Commercial launch with exclusive Schein distribution deal at AAEP, 2016 Positive preliminary topline results of two studies by Integrated Animal Nutrition and Health Inc. to evaluate the safety and effectiveness of Neonorm in piglets	Expansion of distribution in China
	Other farm/production animals	Supports gut health normalizing fecal formation	Selected clinical research	Initiate proof-of-concept studies and partnering discussions, multiple species; multiple geographies

Canalevia is Jaguar's lead prescription drug product candidate, intended for the treatment of various forms of diarrhea in dogs. Equilevia is Jaguar's prescription drug product candidate for the treatment of gastrointestinal ulcers in horses. Canalevia and Equilevia contain ingredients isolated and purified from the *Croton lechleri* tree, which is sustainably harvested. Neonorm Calf and Neonorm Foal are Jaguar's lead non-prescription products. Neonorm is a standardized botanical extract derived from the *Croton lechleri* tree, which is also provided as a botanical extract for piglets and dairy calves in China under an exclusive distribution agreement. Canalevia and Neonorm are distinct products that act at the same last step in a physiological pathway generally present in mammals.

Jaguar is developing Canalevia as a prescription drug product and Neonorm as a non-prescription product due to differences between the companion, horse and production animal markets. Owners of companion animals and equine athletes generally visit veterinarians, who prescribe a product to treat a disease or condition. Jaguar believes the ability to make a disease treatment claim is important in this market, and such a claim is only possible with FDA approval as a prescription product. In contrast, dairy farmers and other production animal owners generally make purchasing decisions based on a product's ability to demonstrate an economic benefit from health endpoints, such as weight gain.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

For Jaguar's prescription product line, Jaguar is seeking protocol concurrences with the FDA where appropriate. A protocol concurrence in animal drug development means that the FDA agrees that the design and analyses proposed in a protocol are acceptable to support regulatory approval of the product candidate with respect to effectiveness of the indication studied and will not change its view of these matters, unless public or animal health concerns arise that were not recognized at the time of concurrence or Jaguar changes the protocol. Jaguar plans to seek concurrence on all major regulatory trials.

Table of Contents

Jaguar has licensed intellectual property from Napo to develop prescription drug product candidates for diabetes and metabolic syndrome for dogs, cats and horses, as well as a topical herpes product for cats. As with Jaguar's lead prescription drug product candidate, these products were tested in animals for safety to support their development for use in humans. Jaguar recently expanded its gastrointestinal product line to include combinations of its proprietary anti-secretory products derived from *Croton lechleri* with the non-absorbed antibiotic, rifaximin, a human approved product, for gastrointestinal indications in all animals. Jaguar is leveraging the data and knowledge gained during the development of human therapeutics into veterinary applications.

Business Strategy

Jaguar's goal is to become a leading animal health company with first-in-class products that address unmet medical needs in both the companion and production animal markets, and the equine market. To accomplish this goal, Jaguar plans to:

Leverage its significant gastrointestinal knowledge, experience and intellectual property portfolio to develop a line of *Croton lechleri*-derived products for production and companion animals, and horses.

Jaguar's management team collectively has more than 100 years of experience in the development of gastrointestinal prescription drug and non-prescription products. This experience covers all aspects of product development, including discovery, preclinical and clinical development and regulatory strategy.

In addition to Jaguar's near-term development efforts advancing Canalevia for dogs, Neonorm Calf for preweaned dairy calves, and Neonorm Foal for young horses, Jaguar is developing formulations of Canalevia and Neonorm to address the unmet medical need for the treatment of acute diarrhea, to improve gut health, to help avoid debilitating, dangerous levels of dehydration, and to normalize fecal formation across multiple animal species and market channels. The development of a full suite of products to support and improve gastrointestinal health in adult horses is one of Jaguar's core focus areas. Gastrointestinal conditions such as acute diarrhea, ulcers and diarrhea associated with acute colitis can be extremely debilitating for horses, and present a significant economic and emotional burden for veterinarians and horse owners around the world. Jaguar's products are designed with a thorough understanding of not only species-specific health issues, but also market practices, the economics of current treatment strategies, competitive dynamics, government initiatives such as concern for extensive antibiotic usage, and effective channels for new product introductions. Many of Jaguar's products are being formulated into separate and distinct gastrointestinal products accounting for multiple specific species, markets and regulatory dynamics.

Establish commercial capabilities, including third-party sales and distribution networks and Jaguar's own targeted commercial efforts, through the launch of Neonorm Calf and Neonorm Foal.

In 2014 Jaguar launched Neonorm in the United States under the brand name Neonorm Calf, and in December 2015 Jaguar conducted the soft launch of Neonorm Foal. Jaguar intends to establish a focused direct commercial effort, initially for the production animal markets. Jaguar will direct its commercial efforts on educational activities and outreach to key opinion leaders and decision makers at targeted regional and global accounts and also plans to continue to partner with leading distributors to commercialize Jaguar's products. Jaguar expects that its current and future distribution partners will have the presence, name recognition, reputation and reach in the veterinary markets and in both key urban and rural centers, as appropriate. Jaguar believes this overall approach is scalable and transferable as it expands its commercialization efforts to companion animals, as well as when it expands internationally.

Table of Contents

Launch Canalevia and Jaguar's other product candidates for companion animals, if approved, leveraging the commercial capabilities and brand awareness Jaguar is currently building.

Jaguar has nine active INADs filed with the FDA and intends to develop species-specific formulations of Neonorm in six additional target species, formulations of Equilevia in horses, and Canalevia for cats and dogs, and potentially for diarrhea associated with acute colitis in horses.

Expand to international markets.

Jaguar intends to leverage its proprietary product development in the United States to international markets, with meaningful partnerships to address international requirements for product development, registration, and access to commercialization in relevant markets for each of its prescription and non-prescription products. As an example, in February 2015 Jaguar signed a distribution agreement with Biogenesis Bagó, a large veterinary biotechnology company in Latin America, a region that contained approximately 401 million dairy and beef cattle in 2009 and produces approximately 11% of the world's milk supply. The distribution agreement provides Biogenesis Bagó with exclusive distribution rights for Neonorm Calf in Argentina, Brazil, Paraguay, Uruguay, and Bolivia.

Additionally, in September 2016, Jaguar entered an exclusive supply and distribution agreement for *Croton lechleri* botanical extract with Fresno, California-based Integrated Animal Nutrition and Health Inc. for dairy cattle and pigs in the Chinese marketplace. The agreement was executed following the positive results, which Jaguar announced in July 2016, of two studies to evaluate the safety and effectiveness of the botanical extract in piglets. The terms of the agreement specify annual minimum purchase amounts that are required to maintain exclusivity, and state that Integrated Animal Nutrition and Health Inc. is responsible for all activities and costs to obtain all required product registrations, marketing authorizations, and customs clearances for the Chinese market.

According to Index Muni, swine production is projected to reach 672.5 million head in 2017 in China, where pork is still the main protein source for many consumers. According to New Zealand-based NZX Agri, in 2017 there will be 7 million cows "in milk" (lactating cows) in China. With the world's largest population, China has been experiencing an increase in demand for dairy products as a result of sharply increasing income levels, fast-changing food habits, the desire of parents to feed their babies high-protein formula, and the loosening in 2015 of China's longstanding one-child policy, among other factors.

As Jaguar works to expand its commercialization efforts, Jaguar intends to seek out additional opportunities to enter key international markets. Certain markets, such as high performance horses, have strong international synergies benefiting market awareness and demand. Jaguar may also enter into partnerships that include payment of upfront licensing fees for its products and product candidates for markets outside the United States where appropriate.

Identify market needs that can be readily accessed and develop species-specific products by leveraging Jaguar's broad intellectual property portfolio, deep pipeline and extensive botanical library.

In addition to Jaguar's anti-secretory gastrointestinal product development efforts, Jaguar has expanded the depth of its gastrointestinal pipeline product candidates to include combinations of its proprietary anti-secretory products derived from *Croton lechleri* with the non-absorbed antibiotic, rifaximin, a human approved product, for gastrointestinal indications in all animals. Jaguar is also developing products such as Virend for feline herpes and NP-500 for Type II diabetes and metabolic syndrome. Both of these product candidates have been through Phase 2 human clinical testing. In addition, Jaguar has exclusive worldwide rights to Napo's library of over 2,300 medicinal plants for veterinary use in all species. Jaguar believes it has the product candidates and expertise to address

Table of Contents

many unmet animal health needs for both companion and production animals in numerous markets and geographies.

Products in Development

Market Background Acute Diarrhea

Jaguar believes there is an unmet medical need for the treatment of acute diarrhea. The devastating dehydration that often occurs as a result of acute diarrhea in animals, including dogs, horses and preweaned dairy calves, can manifest quickly, have long-term health implications and result in death. Other than the FDA-approved human formulation of crofelemer, there are currently no approved anti-secretory agents Jaguar is aware of that directly address the water loss associated with acute diarrhea. Current treatments for acute diarrhea include oral rehydration solution, or ORS, anti-motility agents, absorbents and antibiotics. However, each of these approaches has known limitations. While ORS replaces the water loss associated with diarrhea, it can often extend the duration and severity of diarrhea. Anti-motility agents work by the mechanism of constipation, or temporarily paralyzing normal intestinal contractions, or peristaltic activity. These agents are contraindicated for chronic use and are therefore inappropriate for certain conditions, such as chronic CID. Anti-motility agents can also cause pain, cramping, and rebound diarrhea. Absorbents simply attempt to absorb the toxin in the gut, often causing additional pain and cramping, and do not directly address the water loss. Antibiotics attempt to treat the infectious agent releasing the toxin, but do not directly address water loss and carry a risk of altering gut flora, which alteration itself can cause diarrhea. Systemic antibiotic usage has also come under increased scrutiny by the FDA due to problems associated with antibiotic resistance.

Jaguar believes that an ideal treatment for acute diarrhea would directly address water loss without causing constipation, affecting normal peristaltic activity or altering normal body absorption of other drugs or normal physiological function of the gut. Jaguar believes addressing water loss associated with acute diarrhea will improve the quality of life of dogs and provide attendant benefits to the dog owner, improve the health and productivity of dairy cattle and provide similar health and economic benefits in multiple other species. Jaguar's gastrointestinal products and product candidates act by normalizing the flow of ions and water in the intestinal lumen, the dysregulation of which is the last step common to the manifestation of acute diarrhea. As a result, Jaguar believes that its products and product candidates may be effective in addressing acute diarrhea, regardless of cause. In addition, the channels that regulate this ion and water flow, including channels known as CFTR and CaCC (the sites of action of Jaguar's gastrointestinal products), are generally present in mammals. Jaguar therefore expects that the clinical benefit shown in humans, preweaned dairy calves, foals, and dogs will be confirmed in multiple other species, including cats and adult horses. Accordingly, Jaguar believes it can bring to market multiple products among multiple species that are first-in-class and effective in preventing the debilitating and devastating ramifications of acute diarrhea in animals.

The following diagram illustrates the mechanism of action of Jaguar's gastrointestinal products, which normalize chloride and water flow and transit time of fluids within the intestinal lumen.

Table of Contents

Canalevia Chemotherapy-Induced Diarrhea (CID) in Dogs

Overview

Canalevia is a three-day, twice-daily formulation of crofelemer that Jaguar is developing for the treatment of CID in dogs. Canalevia is enteric-coated for targeted release of crofelemer, the active pharmaceutical ingredient, or API, in Canalevia, in the intestine. Jaguar has received MUMS designation for Canalevia for the treatment of CID in dogs, which provides an opportunity to shorten the timeframe to commercialization. In June 2015 Jaguar completed a multi-site pilot safety study involving the anticipated commercial formulation of Canalevia for CID. Jaguar has completed submission of all required major technical sections for the NADA for CID to the FDA for phased review. Jaguar expects to receive FDA acknowledgment of the completion of all required technical sections in support of conditional approval of Canalevia in 2017 for CID in dogs. Under MUMS designation, Jaguar would be required to initiate a pivotal study in the five years following conditional approval to generate the data required for full approval.

As Jaguar announced on January 31, 2017, Jaguar and Elanco US Inc., a subsidiary of Eli Lilly and Company, have signed an agreement to license, develop, co-promote and commercialize Canalevia, Jaguar's drug product candidate under investigation for treatment of acute and CID in dogs. The agreement grants Elanco exclusive global rights to Canalevia for use in companion animals. Jaguar and Elanco will collaborate on the global development of the product and on its commercialization in the U.S. Under the terms of the agreement, Jaguar has retained the commercial responsibility for the CID indication of Canalevia in dogs, which has received MUMS designation from the FDA and which the company expects will be the first indication available commercially in the next year. Jaguar plans to market Canalevia for the MUMS indication in 2017, if approved, and for acute diarrhea in early 2018, if approved, through Jaguar's focused commercial efforts and to complement Jaguar's relationships with distribution partners.

Market Opportunity

Jaguar believes there is a significant unmet medical need for the treatment of CID in dogs. There is currently no FDA-approved anti-secretory product that Jaguar is aware of to treat CID in dogs. Jaguar estimates that there are over 230,000 dogs receiving chemotherapy treatment for cancer each year in the United States, with over 25% suffering from CID. Severe diarrhea is a frequent side effect

Table of Contents

of the most commonly administered chemotherapy drugs. Similar to the effects in humans, Jaguar believes that if left untreated, CID in dogs can result in:

fluid and electrolyte losses, which can cause dehydration, electrolyte imbalance and renal insufficiency;

nutritional deficiencies from alteration of gastrointestinal transit and digestion; and

increased risk of infectious complication.

Efficacy of the underlying cancer treatment may also be jeopardized if CID severity requires reductions in the absorption, frequency and/or dosage of chemotherapy. From the dog owner's perspective, there are significant practical implications of CID in dogs that may affect living arrangements, as well as the cost, time and attention required to clean and care for the dog and its surroundings on a daily basis. Veterinarians sometimes prescribe human drugs in an effort to treat CID in dogs, but do not have the benefit of clinical support with respect to efficacy or dosing. In addition, administering a potentially unpalatable human formulation is often difficult and may lead to further uncertainty of the amount actually ingested by the dog.

Jaguar's Solution

Jaguar believes that Canalevia is an ideal treatment for CID in dogs because of its demonstrated novel anti-secretory mechanism of action. Canalevia acts locally in the gut and is minimally absorbed systemically. It does not alter gastrointestinal motility, has no significant effects on normally functioning intestinal ion channels and electrolyte or fluid transport, and has no side effects different from placebo. These features are further augmented by its lack of effects on the absorption and/or metabolism of co-administered chemotherapy drugs, orally or by other routes of administration. Canalevia acts by normalizing the flow of excess ions and water in the intestinal lumen. The flow of excess ions and water into the intestinal lumen is the last step common to the manifestation of acute diarrhea. As a result, Jaguar believes Canalevia may be effective in the treatment of acute diarrhea, regardless of cause, including CID. Jaguar intends to conduct a study in tyrosine kinase inhibitor ("TKI") induced diarrhea in dogs with cancer in 2017, to assist its educational and commercial efforts in anticipation of conditional approval of Canalevia for CID.

Human formulations of crofelemer have been studied and found effective in human patients with various types of watery diarrhea, including traveler's diarrhea, HIV-related diarrhea and other acute infectious diarrheas, including cholera. Crofelemer has been clinically demonstrated to have a safety profile not different from placebo in humans and several animal species, including dogs.

Clinical Data

Canalevia is a canine-specific formulation of crofelemer. A human-specific formulation of crofelemer, Mytesi (formerly known as Fulyzaq), was approved by the FDA in 2012 for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy. A number of clinical studies of crofelemer were conducted by Napo in dogs in support of this approval that included dose toxicity studies. Safety was established by conducting a series of toxicity studies involving a total of 32 dogs six months of age and older. Dosage levels varied within and across the studies: two single dose acute toxicity studies were conducted on four dogs each; two seven-day repeat administration studies were conducted on four dogs each; one 30-day repeat administration study was conducted on four dogs; and one nine-month repeat administration study on eight dogs. The toxicology studies in dogs showed minimal to no adverse effects following dosing up to approximately 50 times the anticipated efficacious dose. The clinical studies previously conducted in dogs also included multiple dose studies. Jaguar is currently conducting safety studies in dogs as young as eight weeks of age to expand the studied dog population for safety label of Canalevia to include younger dogs.

Table of Contents

In multiple third-party human clinical trials involving approximately 2,400 patients, enteric-coated crofelemer showed statistically significant results relative to placebo in normalizing stool formation and improvements in other endpoints related to treating watery diarrhea. In these trials, the "p" values were statistical calculations to determine whether the effects of crofelemer were significant in comparison to placebo based on pre-specified statistical targets. Depending on the trial design, Jaguar specified that any result less than $p=0.05$ would be significant. In a pivotal trial in support of approval for human use, crofelemer demonstrated significant benefit in the chronic indication of diarrhea in adults with HIV/AIDS on anti-retroviral therapy, achieving highly significant results ($p=0.0096$) in the primary endpoint measuring frequency of diarrhea.

In addition to the pivotal trial in HIV/AIDS associated diarrhea, human clinical trials included double-blind, placebo-controlled chronic and acute studies, across different human patient populations, and included safety studies in pediatric patients as young as three months of age. For example, in a 3-day treatment study of approximately 100 adult human patients with acute watery diarrhea of multiple and/or unknown etiologies, crofelemer achieved clinical success in 79% of the patients, compared to 28% receiving placebo ($p<0.05$). Clinical success was defined as the complete cessation of diarrhea for 12 hours or two consecutive normal stools within 48 hours of first dose. Crofelemer also achieved statistical significance across each of the seven other endpoints measured in that study, including a 96% reduction in watery stools from baseline, compared to 54% for placebo ($p<0.05$) and an 89% reduction in urgency compared to 43% for placebo ($p<0.05$). Across the diseases and human patient populations studied to date with crofelemer, there have been no drug related serious adverse events or safety profile different from placebo.

In June 2015 Jaguar completed a pilot safety study involving the anticipated commercial formulation of Canalevia in dogs suffering from CID. The objective of the multi-site study was to determine the safety and tolerability of enteric-coated crofelemer tablets in dogs with CID when administered orally twice daily for six treatments at the recommended dose range of 2-4mg/kg. The eight dogs that participated in the study were enrolled based on current or historical episodes of diarrhea correlating to chemotherapy treatment. The study was a safety assessment as requested by the FDA, and diarrhea or unformed stool consistency was not an eligibility criteria. However, 25% of the dogs entered the study with unformed stools and responded during the treatment with formed or amorphous stools or no stool. None of the remaining dogs progressed to unformed stools.

Canalevia Expansion to Acute Diarrhea in Dogs

Overview

Jaguar is also developing Canalevia for acute diarrhea in dogs, regardless of cause. According to the American Veterinary Medical Association, there were approximately 70.0 million dogs in the United States in 2012. Diarrhea is one of the most common reasons for veterinary office visits for dogs and is the second most common reason for visits to the veterinary emergency room, yet to Jaguar's knowledge there are currently no FDA-approved anti-secretory agents to treat canine diarrhea. Jaguar estimates that in the United States, veterinarians see approximately 6.0 million annual cases of acute and chronic watery diarrhea in dogs, approximately two-thirds of which are acute diarrhea. Jaguar believes that Canalevia will be effective in treating acute diarrhea because it acts at the last physiological step, conserved across mammalian species, in the manifestation of acute diarrhea, regardless of cause, by normalizing ion and water flow in the intestinal lumen.

In December 2015 Jaguar initiated a pivotal field study to evaluate the safety and effectiveness of Canalevia for the treatment of acute diarrhea in dogs. In February 2015 Jaguar completed a randomized, blind, multicenter proof-of-concept study of Canalevia in dogs, with statistically significant results. Crofelemer, the API in Canalevia, demonstrated efficacy in numerous human clinical trials of acute watery diarrhea induced by various infectious pathogens, including *E. coli*, *V. cholera* and

Table of Contents

non-specific pathogens (e.g., Traveler's). Following oral dosing for two or three days, crofelemer, together with ORS, produced significant reduction in watery diarrhea, as demonstrated by the reduction of watery stool passage as well as reduced duration of diarrhea, urgency and dehydration.

As Jaguar announced on January 31, 2017, Jaguar and Elanco US Inc., a subsidiary of Eli Lilly and Company, have signed an agreement to license, develop, co-promote, and commercialize Canalevia, Jaguar's drug product candidate under investigation for treatment of acute and CID in dogs. The agreement grants Elanco exclusive global rights to Canalevia for use in companion animals. Jaguar and Elanco will collaborate on the global development of the product and on its commercialization in the U.S. Under the terms of the agreement, Jaguar has retained the commercial responsibility for the CID indication of Canalevia in dogs, which has received MUMS designation from the FDA and which the company expects will be the first indication available commercially in the next year.

Market Opportunity

Diarrhea is one of the most common reasons for veterinary office visits for dogs and the second most common reason for visits to the veterinary emergency room, yet there are currently no FDA-approved anti-secretory agents Jaguar is aware of to treat the indication. Jaguar estimates that veterinarians see approximately six million annual cases of acute and chronic diarrhea in dogs in the United States, approximately two-thirds of which are acute diarrhea.

Veterinarians typically treat acute diarrhea in dogs with antibiotics, probiotics, dietary restrictions and products approved and formulated for humans, such as Imodium and other anti-motility agents, as well as binding agents that absorb water such as Kaopectate and Pepto-Bismol. None of these treatment options address the water loss associated with acute diarrhea. Further, because none of the human products are FDA approved for animal use, veterinarians do not have the benefit of clinical support with respect to efficacy or dosing. Moreover, administering a potentially unpalatable human formulation is often difficult and may lead to further uncertainty of the amount actually ingested by the dog.

Jaguar believes that Canalevia is an ideal treatment for acute diarrhea in dogs because of its demonstrated novel anti-secretory mechanism of action. If approved for use in acute diarrhea in dogs, Jaguar believes Canalevia will be the only FDA-approved anti-secretory agent to treat diarrhea in dogs.

Clinical Data

Overview. Canalevia demonstrated a statistically significant clinical response and resolution of diarrhea in a randomized, blind, multicenter study, which assessed the clinical efficacy in alleviating clinical signs associated with watery diarrhea in dogs. The five-month trial was completed in February 2015. This was a proof of concept study with the goal of defining endpoint assessments and statistical analyses to inform a trial design to FDA for a pivotal regulatory dog Canalevia study for the more general watery diarrhea indications.

The protocol for this study is based on Jaguar's experience and success in previous human and dairy calf studies evaluating *Croton lechleri* derivatives and their effect on acute diarrhea. Based on the results, Jaguar designed the pivotal trial to evaluate the safety and effectiveness of Canalevia for the indication of acute diarrhea in dogs. In December 2015 Jaguar initiated this pivotal trial. The prospective, blinded, randomized, placebo-controlled study is being conducted on an inpatient basis at private veterinary practices, animal shelters and animal rescues across the U.S. A single protocol is being followed at all sites, and enrolled dogs remain on-site and are individually housed for the duration of the study. The study enrolled 200 dogs exhibiting secretory, or watery, diarrhea. Participating dogs were randomized to receive either Canalevia or a placebo orally twice daily for three days. The study's primary endpoint is to demonstrate a resolution of diarrhea. The study period is divided into three 24-hour treatment periods followed by a 24-hour observation period, and fecal

Table of Contents

assessments are completed at least six times daily. Study completion testing includes a physical examination, clinical pathology testing and a final fecal assessment. Jaguar has completed enrollment of this study and expects top-line results in 1H, 2017. The company expects to file all major sections of the NADA, including the results from this pivotal trial, by mid-2017.

Canalevia Exercise-Induced Diarrhea (EID) in Dogs

Overview

As Jaguar announced on March 14, 2017, it has submitted a formal request to the U.S. Food & Drug Administration's Center for Veterinary Medicine for a determination about whether or not Canalevia qualifies as a "minor use", per the requirements of The Minor Use and Minor Species Animal Health Act (MUMS Act), for the indication of exercise-induced diarrhea (EID) in dogs.

EID is a distinct physiological manifestation that has been recorded in dogs, humans and horses. EID may occur before, during or after sustained physical exertion. EID is a common problem among working dogs, such as sled dogs and military dogs, when subjected to periods of intense, long-duration exercise off-leash. Several mammalian species that physically train and run in competitive events can push themselves to extreme physical demands. At this highest level of physical exertion, secretory diarrhea is a common result, and the diarrhea can be debilitating enough to require medical attention and removal from competition or training. Diarrhea can have serious consequences for the canine athlete due to their high capacity for metabolic heat generation and reliance on evaporative cooling to dissipate that heat.

If Jaguar is successful in obtaining MUMS designation for Canalevia for use in dogs with EID, it is Jaguar's hope that this could lead to access to Canalevia, under conditional approval, for dogs for this indication also within a year. With conditional approval under MUMS designation for Canalevia for use in dogs with EID, Jaguar would be required to initiate a pivotal field study in the five years following such conditional approval to generate the data required for full NADA approval.

Equine Product Candidates

Jaguar is developing a full suite of products to support and improve gastrointestinal health in foals and adult horses. Gastrointestinal conditions such as acute diarrhea, ulcers and diarrhea associated with acute colitis can be extremely debilitating for horses, and present a significant economic and emotional burden for veterinarians and owners around the world.

Ulcers are lesions of the lining of the digestive tract and are very common in horses used for many competitive activities. Jaguar believes that because *Croton lechleri*-derived products have been shown to act locally in the gut and have traditional use and rodent model benefit for ulcers, Equilevia has the potential to address ulcers in horses, as well as diarrhea. EGUS results from both squamous and glandular gastric ulceration. Ulcers can negatively impact the performance of horses which are expected to perform at peak efficiency, including show horses and race horses. Jaguar believes a significant market exists for a product that treats both squamous and glandular ulcers in horses without altering stomach pH. According to a 2005 study, 54% of performance horses have both colonic and gastric ulcers and 97% of performance horses have either a gastric (87%) or a colonic (63%) ulcer. Data from the American Horse Council states that there are currently 9.2 million horses in the U.S., a population that includes 844,531 race horses, more than 2.7 million show horses, and more than 3.9 million recreational horses. Data from the Food and Agriculture Organization of the United Nations indicate that there were approximately 5.7 million horses in Europe in 2013 and nearly 60.0 million horses in 2013 worldwide. Jaguar's goal is to see Equilevia serve as an important tool in the standard of care for equine ulcers.

Table of Contents

In April 2016, Jaguar announced that standard drug testing in race horses having received Equilevia did not detect any substances commonly disallowed by horse racing authorities. The results of this initial study show that Equilevia may offer horse owners an additional advantage in the competition horse world, where requirements exist for animals to compete free from the effect of any drugs. Future work is being planned to confirm these results. The study also provided visual evidence suggesting that feed does not interfere with the product candidate's local availability in the gut.

In November 2016 Jaguar completed enrollment in a dose determination study of the target commercial paste formulation of Equilevia, with both a placebo control arm and a positive control comparator, Merial's GASTROGARD® product. The randomized, blinded, controlled, multisite dose determination study enrolled 121 racehorses two years of age or older. All enrolled horses were diagnosed with glandular and squamous gastric ulcers. The primary objective of the study is to select the minimally effective dose of Equilevia for the treatment of equine gastric ulcers in a future pivotal field study.

Horses on treatment with Equilevia in the dose determination study had higher average winnings as a percent of purse in races during the study treatment period compared with the period in which they raced prior to the study. Horses on placebo or on the positive control had a reduction in their average winnings as a percent of purse during the study treatment period compared with the period in which they raced prior to the study.

Additionally, horses on treatment with Equilevia had higher average total dollar winnings in races during the study period compared with the period in which they raced prior to the study. However, horses on placebo had a reduction in total earnings in races during the study period compared with the period in which they raced prior to the study, whereas horses on GASTROGARD® had essentially no change in their earnings in races compared with the period in which they raced prior to the study.

When analyzing data according to whether or not a horse finished a race in the top 3 or in the top 5, there was also an improvement seen for horses treated with Equilevia during the study treatment period compared with the period in which they raced prior to the study. Horses treated with placebo, however, had a reduction in frequency of finishing in the top 3 or in the top 5 in the study period compared with the period in which they raced prior to the study.

No statistically significant comparisons were generated for the aforementioned exploratory analyses. Racing results in horses treated with Equilevia during Jaguar's dose determination study are of interest because ulcers are a particular problem in equine athletes. This study was not powered for this type of result nor would Jaguar expect to have such a result listed in a product label.

Jaguar completed a dose determination study of the target commercial paste formulation of Equilevia in the fourth quarter of 2016. The equine veterinarians who performed the study were blinded to the treatment assignment, and Jaguar was also blinded to the data at that time. A full analysis of the study data with scoring of squamous and glandular ulcers has undergone independent, blinded review by Dr. Frank Andrews, DVM, MS, Dipl. ACVIM, Professor and Director of the Equine Health Studies Program at Louisiana State University College of Veterinary Medicine, an equine internist specializing in gastric ulcer disease.

As Jaguar announced on March 28, 2017, the third-party review Dr. Andrews conducted of the study data involved viewing gastroscopy videos for all participating horses and evaluating each horse against three separate EGUS grading scales: the McAllister scoring system (which assesses the number and severity of ulcers), the EGUS Council scoring system (which is relevant only for squamous ulcers), and a new visual analog scoring system, relevant for both squamous and glandular ulcers, developed by Dr. Andrews. This study showed consistency in the evaluation of gastric ulcers by the newly developed visual analog scoring system compared to the published McAllister and EGUS Council grading scales,

Table of Contents

and the visual analog scoring system could be an important tool in providing greater precision in gastric ulcers of differing tissue type, such as glandular lesions.

As Jaguar also announced on March 28, 2017, it has entered an exclusive, 60-day evaluation period, commencing April 3, 2017, with a leading multinational animal health pharmaceutical firm regarding Equilevia. All data from the dose determination study will remain confidential during the 60-day evaluation period. The partnering strategy of both Jaguar and Napo is focused on bringing novel gastrointestinal medicines from the two company's extremely broad pipelines to market in a productive and efficient manner, and Jaguar believes entering a possible collaboration with a leading animal health company focused on equine athletes would be an important component of this strategy.

In January 2016 Jaguar announced positive topline results from the proof-of-concept study Jaguar initiated in November 2015 to evaluate the safety and effectiveness of Jaguar's investigational new animal drug, Equilevia, for the treatment of EGUS in horses.

In this prospective, blinded, randomized, negative controlled study, Standardbred or Thoroughbred racehorses were randomized to one of three groups (10 horses per group) and treated for 28 days: horses in the placebo group received water-filled syringes every 6 hours; those in the TRT5 group received 5 grams of Equilevia divided into 2 doses per day; and those in the TRT40 group received 40 grams of Equilevia divided into 4 doses per day. Strict enrollment criteria required patients to have both squamous (non-glandular) and glandular gastric ulcerations. All horses were examined by gastroscopy (stomach endoscope) by blinded equine investigators on Day 0 (prior to treatment; baseline), and on Day 14 (mid-study), Day 28 (last day of treatment) and Day 35 (7 days after last treatment). Treatment-related adverse events were not observed.

With respect to glandular ulcerations, a statistically significantly greater number of horses in both the TRT40 (89%) and the TRT5 (78%) group had an improvement or a resolution of glandular ulcerations, compared with the placebo (25%) group as soon as Day 14. By Day 35, all of the Equilevia treated horses had experienced improvement or resolution, whereas 25% of horses in the placebo group still had not improved or resolved during the study.

With respect to squamous ulcerations, a non-statistically significant dose-dependent effect was observed with 40% and 33% of horses achieving an improvement or a resolution by Day 14 in the TRT40 and TRT5 groups, respectively, compared with 11% of placebo horses. By Day 35, numerically more horses in the TRT40 (60%) and TRT5 (55%) groups had achieved an improvement or a resolution compared with 33% of placebo horses.

In February 2016 Jaguar announced that further analysis of the study results indicates that Equilevia did not alter gastric pH during the trial, or for 7 days after therapy. Gastric pH during therapy was observed to be similar to baseline gastric pH at all measured study time points. Whereas other ulcer treatments (e.g. proton pump inhibitors like omeprazole) rely on a mechanism of action that blocks gastric acid secretion for the treatment and prevention of equine gastric ulcer syndrome (EGUS), Jaguar's preliminary data indicate that Equilevia may have advantages. Treatments for EGUS that do not alter gastric pH are important because maintaining low gastric pH is essential for digestion, for gut immunity and first line defense against pathogens, for the absorption of vitamins and minerals, and for potentially other downstream effects.

Table of Contents

Equilevia may offer horse owners an additional advantage over omeprazole in the competition horse world, where the requirement exists for equine athletes to compete free from the effect of any drugs. International screening limits for horse racing state that omeprazole has a 72-hour detection time. Detection time is defined as the first observed time point at which urine and/or plasma samples collected from a horse are negative for the presence of a specified drug. Because Equilevia acts locally in the gut and is minimally absorbed, it is unlikely that use of this drug product candidate will present any issues related to detection time. Jaguar intends to demonstrate that Equilevia is not systemically absorbed in horses, thereby providing a treatment regimen that can continue without mandatory withdrawal prior to competition. Moreover, Jaguar also aims to demonstrate that Equilevia can be administered in the presence of feed, another constraint of omeprazole administration.

Jaguar also plans to initiate a field study for Equilevia, timed to take place during horse racing off-season, when race horses are available to participate. Following the late stage development toward anticipated FDA approval of Equilevia, Jaguar plans to focus initial promotional efforts on the segment of the equine market that is most likely to seek treatment for EGUS: owners and caregivers of high-value horses, equine athletes, and horses that are insured. According to the American Veterinary Medical Association, an estimated 9% of horse owners in the U.S. have insurance for the animals.

The U.S. patent for use of omeprazole to treat equine ulcers expired in 2015.

Until recently, treatment recommendations for equine ulcers have not differentiated between squamous and glandular disease. However, a series of recent third-party studies indicate considerably lower healing rates for glandular ulcers with standard of care (e.g. omeprazole). Subclinically, these lesions can compromise athletic performance.

Jaguar's goal is to see Equilevia serve as an important tool in the standard of care of horses with all types of ulcers. While Jaguar is initially developing Equilevia for the indication of EGUS, Jaguar plans to investigate the possible efficacy of this product candidate for treatment of colonic ulcers as a follow on indication in horses following the anticipated launch of Equilevia.

Jaguar also intends to develop a species-specific formulation of crofelemer to treat diarrhea associated with acute colitis in horses. Jaguar believes colitis affects thousands of horses in the United States each year, and in December 2015 Jaguar completed a pilot safety study in conjunction with Louisiana State University to evaluate crofelemer in adult horses, the first step in the development program for diarrhea associated with acute colitis. The study involved three healthy horses treated with three consecutive, three-day cycles of escalating dose levels (up to approximately eight times the proposed dosage in horses) of an oral crofelemer paste. Clinical observations, vital signs, biochemical changes (complete blood count, serum chemistry and urinalysis) and adverse events were evaluated for dose-limiting toxicity after each dose level. The study concluded that dose-limiting toxicities were not observed at any of the three dose levels.

Crofelemer Cats

According to the American Veterinary Medical Association, there were approximately 74.0 million cats in the United States in 2012. Jaguar estimates that veterinarians see approximately 2.9 million annual cases of acute diarrhea in cats. Veterinarians typically treat acute diarrhea in cats with the same treatments used for dogs, namely antibiotics, probiotics, dietary restrictions and products approved and formulated for humans, such as Imodium and other anti-motility agents, as well as binding agents that absorb water such as Kaopectate and Pepto-Bismol.

Jaguar is currently developing a species-specific formulation of crofelemer, Felevia, for cats. Jaguar intends to initiate safety and proof-of-concept studies in cats in 2017.

As Jaguar announced on January 31, 2017, Jaguar and Elanco US Inc., a subsidiary of Eli Lilly and Company, have signed an agreement to license, develop, co-promote, and commercialize Canalevia,

Table of Contents

Jaguar's drug product candidate under investigation for treatment of acute and CID in dogs. The agreement grants Elanco exclusive global rights to Canalevia for use in companion animals. Jaguar and Elanco will collaborate on the global development of the product and on its commercialization in the U.S.

Neonorm Calf Helps proactively retain fluids in dairy and beef calves aiding the animals in avoiding debilitating, dangerous levels of dehydration

Overview

This formulation of Neonorm is an enteric-coated tablet designed to be orally administered to preweaned dairy and beef calves twice daily for three days.

According to the *Dairy 2007* study conducted by the USDA, almost one in four preweaned dairy heifers, or female calves, suffers from diarrhea or other digestive problems. The preweaning period is generally the first 60 days after birth. Scours, diarrhea or other digestive problems are responsible for more than half of all preweaned heifer calf deaths, and result in impaired weight gain and long-term reduction in milk production. Jaguar believes that the incidence rate of scours and its corresponding financial impact represent a health and business opportunity and that Neonorm Calf has the potential to effectively meet this need.

A challenge clinical study was completed in May 2014 by researchers from Cornell, and published in 2015 in the official journal of the American Dairy Science Association, *Journal of Dairy Science*. The results of this study suggest that Neonorm Calf can significantly increase the fecal dry matter of neonatal calves with experimentally-induced enterotoxigenic *E. coli* diarrhea, and suggest a potential benefit of Neonorm Calf in supporting weight gain in calves.

In 2014 Jaguar launched Neonorm for preweaned calves in the United States under the brand name Neonorm Calf. Jaguar does not believe that Neonorm Calf fits within the FDA's definition of an animal drug, food or feed additive. Thus, Jaguar does not believe that it is regulated by the FDA at this time. The FDA previously regulated a human-specific formulation as a dietary supplement, rather than as a drug. To support the commercial launch, Jaguar completed field studies of Neonorm Calf involving approximately 400 preweaned dairy calves in total with Cornell University and in collaboration with its distributor, Animart.

A further analysis, completed in October 2015, of the above-referenced Cornell study supports a benefit of Neonorm Calf on the optimization of the intestinal microbiome profile in preweaned dairy calves, a potential prebiotic benefit. The microbiome is a community of microorganisms that live normally in the gut and are vital to maintenance of gut health.

Jaguar is developing a second generation Neonorm Calf product formulation to be administered in liquid for total head prophylactic management of diarrhea, or scours. In January 2016 Jaguar announced the initiation of a placebo-controlled study in conjunction with researchers from Cornell to evaluate the efficacy of the prophylactic use of a second-generation formulation of Neonorm Calf administered in liquid on naturally occurring diarrhea and dehydration in preweaned dairy calves and investigate the possible prebiotic benefit of the product. This double-blinded, randomized study involved 40 Holstein bull calves affected with naturally occurring diarrhea. The study results, announced in June and September of 2016, show that calves under prophylactic administration of Neonorm Calf had significantly lower water content in fecal samples at multiple measurement points, lower incidence of diarrhea, and had fewer fluid therapy interventions. A paper on this study, titled "Prophylactic use of a standardized botanical extract for the prevention of naturally occurring diarrhea in newborn Holstein calves", was published in the official journal of the American Dairy Science Association, *Journal of Dairy Science* a leading peer-reviewed general dairy research journal.

Table of Contents

Scours Market Opportunity

Scours refers to watery diarrhea in production animals, including dairy calves, which results from infectious agents that cause the secretion of ions and water into the intestinal lumen. Animals with scours may experience severe dehydration and electrolyte imbalance, which can lead to renal insufficiency, nutritional deficiencies, lower production in dairy cattle and even death. Current therapy includes fluid and electrolyte replacement, continuous milk feeding, antibiotics (for calves with systemic involvement (*e.g.*, fever) with an increased risk of bacteremia), non-steroidal anti-inflammatory drug therapy and vaccines.

According to the USDA, there are approximately 9.2 million lactating dairy cows in the United States. Jaguar estimates from USDA sources that there were over 11.0 million dairy calves born in 2013. Dairy cows are continuously bred, both to maintain lactation and to produce dairy calves to maintain the herd. Dairy calves are separated from their mothers shortly after birth and raised on commercial milk replacers until weaned at about 60 days of age. Almost one in four, or 23.9%, of dairy heifer calves had diarrhea or other digestive problems according to the USDA *Dairy 2007* study. Scours, diarrhea or other digestive problems are responsible for more than half of all preweaned calf deaths, and result in supportive care and treatment costs, impaired weight gain and long-term reduction in milk production. Of dairy farm operations surveyed in the *Dairy 2007* study, 62.1% used antibiotics for diarrhea or other digestive problems, including preweaned heifer calves not reporting diseases or disorders. Of preweaned calves that were affected by diarrhea or other digestive problems, almost three-fourths, or 74.5%, were treated with an antibiotic.

Jaguar's Solution

Jaguar believes Neonorm Calf is an ideal solution to aid fluid retention in dairy and beef calves suffering from scours. Neonorm Calf has been formulated and clinically tested to support fluid retention by specifically addressing the normalization of stool formation and ion and water flow in the intestinal lumen of newborn dairy calves with scours. There are an estimated 22.0 million beef calves in the United States, and published sources indicate that approximately 2.4% of beef calves younger than three weeks old suffer from diarrhea. Like Canalevia, Neonorm Calf acts locally in the gut and is minimally absorbed systemically. It does not alter gastrointestinal motility, has no significant effects on normally functioning intestinal ion channels and electrolyte or fluid transport, and has no side effects different from placebo. As a result, stool formation is normalized in a short period of time, weight loss is mitigated, supportive care costs and rehydration therapies such as ORS are reduced, and the risk of mortality is minimized.

Clinical Data

A challenge clinical study was completed in May 2014 by researchers from Cornell, and published in 2015 in the official journal of the American Dairy Science Association, *Journal of Dairy Science*. The results of this study suggest that Neonorm Calf can significantly increase the fecal dry matter of neonatal calves with experimentally-induced enterotoxigenic *E. coli* diarrhea, and suggest a potential benefit of Neonorm Calf in supporting weight gain in calves.

A further analysis, completed in October 2015, of the above-referenced Cornell study supports a benefit of Neonorm Calf on the optimization of the intestinal microbiome profile in preweaned dairy calves, a potential prebiotic benefit. The microbiome is a community of microorganisms that live normally in the gut and are vital to maintenance of gut health.

Jaguar recently completed a placebo-controlled study in conjunction with researchers from Cornell to evaluate the herd-wide efficacy of the prophylactic use of a second-generation formulation of Neonorm Calf administered in liquid on naturally occurring diarrhea in preweaned dairy calves and investigate the possible prebiotic benefit of the product. This double-blinded, randomized study

Table of Contents

involved 40 Holstein bull calves affected with naturally occurring diarrhea. The study results show that calves under prophylactic administration of Neonorm Calf had significantly lower water content in fecal samples at multiple measurement points, lower incidence of diarrhea, and had fewer fluid therapy interventions. The possible beneficial prebiotic mechanism of Neonorm Calf would supplement and is potentially synergistic with the anti-secretory and weight gain benefits of the product.

Fecal scoring, which was conducted daily during the study period, indicated a significantly lower incidence of diarrhea among Neonorm-treated calves on most treatment days than among calves in the placebo group. The study also assessed the incidence of diarrhea from days 1 to 25 of life. Calves in the Neonorm-treated group experienced a highly significant reduction in the incidence of diarrhea during this period compared to those in the placebo group.

Dehydration was assessed twice daily for all calves in the study. Results showed that severe dehydration requiring the administration of intravenous ("IV") fluid therapy was reduced by approximately 50% in the Neonorm-treated calves. Moreover, overall rescue therapy, requiring either oral or IV fluid administration, for both severe and moderate dehydration, was significantly reduced in the Neonorm-treated animals.

As Jaguar announced on February 2, 2017, Jaguar has begun entry into the organic market with Neonorm Calf, following listing of Neonorm Calf with an organization that evaluates livestock products in accordance with the U.S. Department of Agriculture (USDA) National Organic Standards on behalf of specified producers in New York state. Additionally, Jaguar is applying to have Neonorm Calf listed by the Organic Materials Review Institute (OMRI). OMRI is an international nonprofit organization that determines which input products are allowed for use in organic production and processing. OMRI Listed® products are allowed for use in certified organic operations under the USDA National Organic Program. According to the Organic Trade Association's (OTA) 2016 Organic Industry Survey, the U.S. organic industry posted new records in 2015, with total organic product sales hitting a new benchmark of \$43.3 billion, up 11% from the previous year's record level and outpacing the overall food market's growth rate of 3%. According to OTA, dairy, the second biggest organic food category, accounted for \$6.0 billion in sales, an increase of over 10%, and dairy accounts for 15% of total organic food sales.

Organic livestock production plays a vital role in support of a sustainable and safe farm and food system, both in the U.S. and internationally. According to a report published by Allied Market Research, the global market for organic dairy food and drinks – organic milk, yogurt, cheese, and others – is expected to grow at a compound annual growth rate of 14.25% from 2016 to reach \$36.7 billion by 2022 from \$14.5 billion in 2015. Jaguar believes Neonorm Calf will qualify as allowable for use on certified organic dairies throughout the U.S., and Jaguar is currently working to obtain additional required listings.

Neonorm Line Extensions

Jaguar believes that due to Neonorm Calf's mechanism of action and its data in preweaned dairy calves, Jaguar will be able to develop and commercialize species-specific formulations of Neonorm for multiple other animal species, such as horses, goats and sheep. Jaguar believes that there is an opportunity to target large-scale commercial livestock operations, first in the United States, and later, internationally. In less developed nations, where not only dairy and beef cattle but also buffalo, goat and sheep provide livelihoods for local populations, reducing losses related to diarrhea can provide significant monetary, social and health benefits. Today, these groups are already accessed by distributors with whom Jaguar intends to work to extend the reach of Neonorm Calf and line extension products.

In November 2015 Jaguar completed an initial proof-of-concept study (NEO101) of Neonorm Foal, its lead non-drug product to promote normal fecal formation and reduce fluid loss in foals, that involved 60 foals. The objective of this randomized, multi-site, blinded, placebo-controlled study was to evaluate the safety and performance of the product for treatment of foals suffering from secretory

Table of Contents

diarrhea, and the treated animals received Neonorm Foal in combination with a third-party probiotic. In December 2015 Jaguar announced positive results for an exploratory, investigator-initiated follow-up study (ARG102) which assessed the safety and performance of Neonorm Foal, without inclusion of a probiotic, in preweaned foals with watery diarrhea. The results of a meta-analysis between the two studies, which both took place in Argentina, demonstrated a significantly higher percentage of foals with clinical response and resolution of diarrhea for Neonorm Foal, from either ARG102 or NEO101, compared with the placebo group in NEO101.

During the 72-hour administration period, 35% of foals receiving the placebo in NEO101 were identified as clinical responders, compared with 85% of foals treated with Neonorm Foal in ARG102. For the purposes of both studies, clinical responders were defined as foals that achieved a formed stool by the end of the reported period.

During the 72-hour administration period, resolution of diarrhea was observed in 41% of placebo-treated foals in NEO101 compared with 85% of foals receiving Neonorm Foal in ARG102. For the purposes of both studies, resolution of diarrhea was defined as a foal that produced a formed stool at any point during the reported period.

The reception among users of Neonorm Foal, the anti-diarrheal for newborn horses that Jaguar launched in early 2016 with a nationwide campaign offering samples, has been overwhelmingly positive. User feedback regarding Neonorm Calf also continues to be very favorable. Commercialization of these two non-prescription products has provided numerous benefits that Jaguar intends to leverage during its expected introductions of high value, first-in-class prescription drug products into the U.S. marketplace and beyond. The commercialization process has allowed us to extend to animals the clinical utility of the novel mechanism of action of *Croton lechleri*-derived anti-secretory products, refine messaging to veterinarians, fine-tune internal processes, forge commercial manufacturing relationships, and develop commercial infrastructure with important distributors relevant to both prescription and non-prescription products.

In December 2015 Jaguar conducted the soft launch of Neonorm Foal. Jaguar is planning studies of an equine formulation of Neonorm for adult horses with episodic diarrhea. Published studies estimate that there were 9.2 million horses in the United States in 2005. Diarrhea is among the most common clinical complaints in foals. Often, diarrhea occurs in the first 30 days of the foal's life, both from infections and non-infectious causes, such as lactose intolerance and overfeeding. Some cases are severe and life threatening. A majority of foals will exhibit diarrhea at some point within the first two months of life. In adult horses, episodic diarrhea is mostly associated with diseases of the large intestine and damage to the colon or disturbance of colonic function. Typically, diarrhea in horses is treated with fluid replenishment and electrolytes, deworming agents and antibiotics, and intestinal protectants and absorbents, as well as anti-motility agents. To Jaguar's knowledge there are currently no anti-secretory products approved by the FDA for veterinary use.

Other Product Candidates and Development

Jaguar has planned multiple clinical studies over the next 12 to 18 months to expand Canalevia and Neonorm to additional species. Jaguar believes that it will be successful because:

Jaguar has existing safety and efficacy data for its products and product candidates in dogs, dairy calves and/or humans;

each of these products works through the normalization of ion and water flow into the intestinal lumen; and

this physiological pathway is generally present in mammals.

Table of Contents

Additionally, Jaguar plans to initiate a safety and proof of concept study for Virend in 2017. Both Virend and NP-500 have been through Phase 2 human clinical testing by third parties and studies with combinations of rifaximin and *Croton lechleri* derived products. NP-500 is isolated and purified from a plant indigenous to the southwestern United States, and in traditional medicine, the plant was brewed as a tea and used for the treatment of diabetes and other various illnesses. Jaguar is currently developing species-specific formulations of NP-500 to treat obesity-related metabolic dysfunction in dogs, Type II diabetes in cats and metabolic syndrome in horses, and have filed three INADs for these indications.

According to a 2013 national survey of veterinarians, approximately 17% of dogs in the United States are obese. Studies show that obesity is more common in elderly dogs, as well as in neutered dogs. Obesity-related metabolic dysfunction manifests in altered lipid profiles, insulin resistance and mild hypertension, which could decrease a dog's lifespan. There are currently no FDA-approved products for the treatment of metabolic syndrome or insulin resistance in dogs. In cats, the prevalence of obesity-related diabetes or Type II diabetes is high and increasing. In horses, insulin resistance is associated with an equine metabolic syndrome characterized by obesity, regional adiposity and hypertriglyceridemia. It is also known to be a risk factor for laminitis. Various studies report the prevalence of insulin resistance as 10% and 28% in horses and ponies, respectively. There are also currently no FDA-approved products for the treatment of metabolic syndrome in horses.

Jaguar anticipates that its development activities will benefit from centralized activities, including shared use of the manufacturing and regulatory documentation for chemistry, manufacturing and controls, or CMC. Jaguar also anticipates being able to enter into combined clinical research agreements and activities with companion animal clinical trial sites for dogs and cats.

Sales and Distribution

As Jaguar announced on January 31, 2017, Jaguar and Elanco US Inc., a subsidiary of Eli Lilly and Company, have signed an agreement to license, develop, co-promote, and commercialize Canalevia, Jaguar's drug product candidate under investigation for treatment of various types of diarrhea in dogs. The agreement grants Elanco exclusive global rights to Canalevia for use in companion animals. Jaguar and Elanco will collaborate on the global development of the product and on its commercialization in the U.S.. Under the terms of the agreement, Jaguar has retained the commercial responsibility for the CID indication of Canalevia in dogs, which has received MUMS designation from the FDA and which the company expects will be the first indication available commercially in the next year. Jaguar has also retained the commercial responsibility for the EID indication of Canalevia in dogs.

As Jaguar announced on December 12, 2016, Jaguar has signed a distribution agreement with Henry Schein, Inc., the world's largest provider of health care products and services to office-based dental, animal health and medical practitioners, for exclusive distribution of Jaguar's Neonorm Foal product to all segments of the U.S. equine market. Henry Schein's animal health business, Dublin, Ohio-based Henry Schein Animal Health, employs approximately 900 team members and had 2015 net sales of \$2.9 billion. With 12 strategically positioned, state-of-the-art distribution facilities and 10 inside sales centers nationwide, Jaguar believes Henry Schein Animal Health is positioned to bring a broad selection of veterinary products and strategic business solutions to more than 26,000 veterinary professionals nationwide. The agreement became effective on December 9, 2016, and, subject to provisions specified in the agreement, shall continue in force for an initial period of one year. Thereafter, unless either party notifies the other of its intent not to renew the term of the agreement at least 30 days prior to the end of the then current term, the term shall be automatically renewed upon expiration for successive renewal terms of one year.

In September 2014, Jaguar launched Neonorm for preweaned dairy calves under the brand name Neonorm Calf in the Upper Midwest region, and expanded the launch nationwide in early 2015. In

Table of Contents

December 2015 Jaguar conducted the soft launch of Neonorm Foal, its non-prescription anti-diarrheal product for newborn horses. Jaguar expects to launch Canalevia in 2017 for CID, and for acute diarrhea in early 2018. Jaguar intends to continue the development of its focused commercial effort for both the production and companion animal markets. Jaguar will focus its commercial efforts on educational activities and outreach to key opinion leaders and decision makers at key regional and global accounts for production animals and high prescriber veterinarians for companion animals. In August 2014, Jaguar entered its first regional distribution agreement for the Upper Midwest region, and in September 2014, entered an agreement with a national master distributor, who also distributes prescription products for the companion animal market. In February 2015, Jaguar entered a five-year distribution agreement with Biogenesis Bagó for sale and distribution of Neonorm Calf in South America. Biogenesis Bagó is the largest veterinary biotechnology company in Latin America, a region that contained approximately 401 million dairy and beef cattle in 2009 and produces approximately 11% of the world's milk supply. In 2014 Biogenesis Bagó was named "Best Animal Health Company in Latin/South America" by a publication called Animal Pharm. Jaguar's distribution agreement provides Biogenesis Bagó with exclusive distribution rights for Neonorm Calf in Argentina, Brazil, Paraguay, Uruguay, and Bolivia. Under the terms of the distribution agreement, Jaguar can terminate the agreement if Biogenesis Bagó fails to meet annual sales goals for each year of the five-year agreement, and Jaguar may revoke exclusivity if Biogenesis Bagó fails to meet guaranteed minimum sales. Jaguar also agreed to additional incentive payments if stretch goals are exceeded.

Jaguar plans to partner with other leading distributors to deliver its products to customers both in the United States and internationally, and may also explore entering partnerships that include payment of upfront licensing fees for its products and product candidates for markets outside the United States where appropriate. Jaguar expects that its current and future partners will have the presence, name recognition, reputation and reach in the veterinary markets and in both key urban and rural centers, as appropriate. Jaguar believes this overall approach is scalable and transferable as Jaguar expands its commercialization efforts, as well as when Jaguar further expands internationally including to resource-constrained countries where food safety issues are emerging global challenges.

Manufacturing

The plant material used to manufacture Canalevia, Neonorm and related products is crude plant latex, or CPL, extracted and purified from *Croton lechleri*, a widespread and naturally regenerating tree in the rainforest that is managed as part of sustainable harvesting programs. The tree is found in several South American countries and has been the focus of long-term sustainable harvesting research and development work. Jaguar's collaborating suppliers obtain CPL and arrange for the shipment of CPL to Jaguar's third-party contract manufacturer. CPL will also be shipped to Jaguar for manufacturing after Jaguar establishes its own API manufacturing capability.

Jaguar's third-party contract manufacturer will process CPL into both crofelemer, the API in Canalevia, and the botanical extract used in both Neonorm Calf and Neonorm Foal. This manufacturing process uses exclusive Napo intellectual property licensed pursuant to the Napo License Agreement. Canalevia will be manufactured by the same process used to manufacture the API that was used in the animal safety studies and the human studies in support of the approval of Myesi (formerly known as Fulyzaq). Napo has also licensed this intellectual property to third parties in connection with its licenses related to the development and commercialization of crofelemer for human use. While Jaguar believes these third parties have developed their own proprietary manufacturing specifications pursuant to their license agreements, such third-party intellectual property is unknown to Jaguar, is not licensed to Jaguar pursuant to the Napo License Agreement, and is not part of the intellectual property that Jaguar intends to use for the manufacture of API in its licensed field of use. Similarly, the manufacture of Neonorm depends only on technology licensed from Napo. The license grant specifically excludes intellectual property rights developed pursuant to a prior collaboration agreement

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

between Napo and Glenmark Pharmaceuticals, Ltd., or Glenmark, the manufacturer of the API in Mytesi (formerly known as Fulyzaq). In May 2014 and June 2014, and as amended in February 2015, Jaguar entered into binding memorandums of understanding with Indena S.p.A. to negotiate a definitive commercial supply agreement for the manufacture of the API in Canalevia and the botanical extract in Neonorm. Jaguar has furnished equipment to Indena S.p.A. for use in a facility that will be dedicated to the manufacture of crofelemer and the botanical extract.

In December 2015, Indena delivered 360 kilos of the standardized botanical extract to Jaguar. Jaguar currently owns enough of the Neonorm standardized botanical extract to formulate a combination of approximately one million treatments of Neonorm Calf or Neonorm Foal.

Pursuant to the memorandums of understanding as amended, Jaguar agreed to pay Indena S.p.A. the following fees in connection with the establishment of its manufacturing arrangement:

a start-up fee equal to €500,000, payable in two equal installments, both of which were paid in May 2015;

fees associated with the technology transfer and manufacturing process adaptation equal to €620,000 for API which was paid in May and July 2015;

fees for the design and set up of a dedicated suite qualified for pharmaceutical and veterinary products equal to €170,000 which was paid in May 2015;

deliverables fees equal to €500,000, €250,000 of which was paid in December 2015, and €250,000 of which was payable by the end of March 2016, with the understanding that these fees will be credited against payments agreed to under the future commercial supply agreement; and

a €300,000 bonus fee payable in two equal installments, the first of which was paid in March 2015, with the remainder paid by the end of March 2016.

Jaguar has made all contractual payments to Indena as of March 31, 2016. In March 2015, Indena S.p.A. agreed to delay payment of the fees payable by the end of March 2015 until the earlier of April 30, 2015 or the completion of Jaguar's initial public offering. In July 2015 and December 2015 Indena S.p.A. agreed to delay payment of certain fees payable until March 2016. Jaguar has made all contractual payments to Indena as of March 31, 2016. In June 2014, as contemplated by the memorandums of understanding, Jaguar also issued Indena S.p.A. a warrant to acquire 16,666 shares Jaguar common stock at an exercise price per share equal to 90% of the initial public offering price, which expires in June 2019.

In September, 2015 Jaguar entered a distribution agreement with Glenmark Pharmaceuticals Ltd., or Glenmark. With the execution of the agreement, Jaguar intends to use Glenmark as Jaguar's primary manufacturer of crofelemer for animal health use. Jaguar's agreement with Glenmark supplements its previously announced manufacturing agreement with Indena S.p.A. for the standardized botanical extract in Neonorm Calf and Neonorm Foal. Jaguar intends to eventually use Indena as an alternative supplier for crofelemer.

In October 2015, Jaguar announced that it signed a crofelemer formulation development and manufacturing contract with Patheon Pharmaceuticals Inc., or Patheon, a leading global provider of drug development and delivery solutions to the global pharmaceutical and biopharma industries. Under the terms of the contract, Patheon will provide enteric-coated crofelemer tablets for Jaguar for use in animals. The tablets will be used in Jaguar's pivotal efficacy trial for Canalevia, which began in the fourth quarter of 2015. Jaguar expects to use safety and effectiveness data from this trial in support of the initiation of the filing of a NADA with the FDA for Canalevia in 2017 for the indication of acute diarrhea in dogs.

Table of Contents

Patheon is the manufacturer of Mytesi (formerly known as Fulyzaq), a human-specific, enteric-coated formulation of crofelemer that was approved by the FDA in 2012 for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy. Members of Jaguar's management team developed crofelemer while working at Napo where the drug was initially developed.

Jaguar also plans to enter agreements with third parties for the formulation of the API and botanical extracts into finished products to be used for planned studies and commercialization.

The facilities of Jaguar's third-party contract manufacturers that will manufacture Jaguar's API and botanical extract, as well as formulate Jaguar's finished products, comply with cGMP and other relevant manufacturing requirements.

Competition

The animal health industry is dominated by large independent companies such as Zoetis Inc., a standalone animal health company that was spun out from Pfizer, Inc. in 2013, as well as subsidiaries of large pharmaceutical companies, including Novartis Animal Health Inc., a subsidiary of Novartis International AG., Merck Animal Health, the animal health division of Merck & Co., Inc., Merial Inc., the animal health division of Sanofi S.A., Elanco Animal Health, the animal health division of Eli Lilly and Company, Bayer Animal Health GmbH, a subsidiary of Bayer AG, and Boehringer Ingelheim Animal Health, the animal health division of Boehringer Ingelheim GmbH. There are also animal health companies based in Europe, including V  toquinol S.A., Virbac S.A., Dechra Pharmaceuticals PLC and Ceva Animal Health S.A.

Additionally, smaller animal health companies, such as Aratana Therapeutics, Inc., Kindred Biosciences, Inc., Phibro Animal Health Corporation, Nexvet Biopharma and Parnell Pharmaceuticals Holdings Ltd, recently completed initial public offerings of their stock in the United States and may choose to develop competitive products. Jaguar believes that the large human pharmaceutical companies may also decide to spin out their animal health subsidiaries into standalone companies.

Although, to Jaguar's knowledge, there are currently no FDA-approved anti-secretory products to treat acute diarrhea in dogs, Jaguar anticipate that Canalevia, if approved for this indication, will face competition from various products, including products approved for use in humans that are used extra-label in animals. Jaguar is aware that veterinarians typically treat acute diarrhea in dogs with antibiotics, probiotics, dietary restrictions and products approved and formulated for humans, such as Imodium and other anti-motility agents, as well as binding agents that absorb water, such as Kaopectate and Pepto-Bismol. None of these treatment options address the water loss associated with acute diarrhea. Jaguar is not aware of any veterinarians prescribing Mytesi (formerly known as Fulyzaq) extra-label for use in dogs, and the indication of Mytesi is for a disease that does not occur in dogs. Further, because none of the human products are FDA approved for animal use, veterinarians, although allowed to dispense human products for animal use, do not have the benefit of clinical support with respect to efficacy or dosing. Moreover, administering a potentially unpalatable human formulation is often difficult and may lead to further uncertainty of the amount actually ingested by the dog. However, this practice may continue and Canalevia may face competition from these products. Canalevia could also potentially face competition from Mytesi were veterinarians to prescribe it extra-label. Extra-label use is the use of an approved drug outside of its cleared or approved indications in the animal context. All of Jaguar's potential products could also face competition from new products in development. These and other potential competing products may benefit from greater brand recognition and brand loyalty than Jaguar's products and product candidates may achieve.

Table of Contents**Intellectual Property****Napo License Agreement**

In January 2014, Jaguar entered into the Napo License Agreement, which Jaguar amended and restated in August 2014 and further amended in January 2015, pursuant to which Jaguar acquired an exclusive, sublicensable, transferable, worldwide license to certain intellectual property rights of Napo and its affiliates to research, develop, formulate, make, have made, use, have used, market, offer for sale, sell, have sold, and import, and to otherwise exploit products of Napo and its other affiliates for all veterinary treatment uses and indications for all species of animals. The license grant specifically excludes intellectual property rights developed pursuant to a prior collaboration agreement between Napo and Glenmark Pharmaceuticals, Ltd., the manufacturer of the API in Mytesi (formerly known as Fulyzaq). Under the Napo License Agreement, Napo also assigned to Jaguar certain raw materials and equipment and granted Jaguar a right of reference to the entirety of the information included in the human approved new drug application of crofelemer.

Under the terms of the Napo License Agreement, Jaguar is responsible for, and shall ensure, the development and commercialization of products that contain or are derived from the licensed Napo technology (collectively referred to herein as the Products) worldwide in the field of veterinary treatment uses and indications for all species of animals.

In consideration for the license, Jaguar is obligated to pay a one-time non-refundable license fee of \$1.75 million, less the option fee of \$100,000 paid in July 2013 pursuant to a term sheet Jaguar signed with Napo. Jaguar paid \$25,000 to Napo towards the license fee in December 2014 and in January 2015, agreed that the remaining license fee payment will be paid in cash, or, if mutually agreed with Napo, in shares of Jaguar common stock according to the following schedule:

Payment Date	License Fee Amount
Amendment Date	\$ 25,000
March 31, 2015	\$ 25,000
June 30, 2015	\$ 150,000
September 30, 2015	\$ 500,000
December 31, 2015	\$ 500,000
March 31, 2016	\$ 425,000
Total	\$ 1,625,000

In the years ended December 31, 2016 and 2015, Jaguar paid \$425,000 and \$1.2 million in accordance with the agreement.

Pursuant to the Napo License Agreement, Jaguar will owe Napo a 2% royalty on annual net sales of all Products that are prescription drugs (such as Canalevia and any line extensions) approved by the FDA or the equivalent regulatory agency in another country, and a 1% royalty of annual net sales of non-prescription products (such as Neonorm and any line extensions) that do not require pre-marketing approval from the FDA or the equivalent regulatory agency in another country. Upon agreement with Napo, Jaguar may elect to remit any milestone payments and/or royalties in the form of Jaguar common stock.

The royalty term expires on a country-by-country and Product-by-Product basis on the later of: (i) 10 years from the first sale of a Product in such country, on an animal by animal basis; and (ii) the first date on which there is no longer (A) a valid claim within the licensed patent rights covering the use, manufacture or sale of such Product, or (B) any data exclusivity with respect to such Product in such country conferred by the applicable regulatory authority, and in each case of (A) and (B), a competitive product has been introduced into the market in such country. The royalties payable to

Table of Contents

Napo are subject to reduction, capped at a specified percentage, for any third-party payments made to obtain a license or other rights to issued patents that might present a commercial obstacle to the development, manufacture, use, or sale of a Product in a country. Additionally, if the royalty term for a Product is ongoing post-expiration of the last valid claim within the licensed patent rights that covers such product in any given country, then the royalties Jaguar owes Napo will be reduced by a specified percentage until expiration of the royalty term for such Product in such country. Upon the expiration of each royalty term, on a country-by-country and Product-by-Product basis, the license grants shall be fully paid up and Jaguar will have perpetual non-exclusive licenses for such Products in such countries. At any time during the term of the agreement, if Napo sells all of its assets relating to the use, production or exploitation of *Croton lechleri* derivative products to a third party, all of the rights granted to us relating to *Croton lechleri* derivative products under the license shall become exclusive in the field of veterinary treatment uses and indications for all species of animals, perpetual, fully paid-up, royalty-free and irrevocable, with the right to grant sublicenses.

Under the terms of the Napo License Agreement, Jaguar owns all rights, title and interest in its intellectual property and any joint intellectual property developed under the license. Jaguar granted Napo a non-exclusive, paid-up, irrevocable worldwide license to Jaguar's intellectual property developed under the Napo License Agreement for use outside the veterinary field, and an exclusive, paid-up worldwide license to any joint intellectual property developed under the Napo License Agreement outside the veterinary field. Jaguar agreed to defend, indemnify and hold Napo, its affiliates, and its officers, directors, employees, consultants and contractors harmless from and against any losses, costs, damages, liabilities, fees and expenses arising out of any third-party claim related to Jaguar's gross negligence or willful misconduct, breach of Jaguar's representations, warranties or covenants or the manufacture, sale or use of the Product or Products, in each case, unless such third-party claim is subject to indemnification by Napo. Napo agreed to defend, indemnify and hold Jaguar, its affiliates, and its officers, directors, employees, consultants and contractors harmless from and against any losses, costs, damages, liabilities, fees and expenses arising out of any third-party claim related to Napo's, its affiliate's or its licensees' (except for us) gross negligence or willful misconduct, or Napo's breach of its representations, warranties or covenants.

Jaguar may terminate the Napo License Agreement upon Napo's uncured material breach, bankruptcy or at will after certain notification periods. Napo may terminate the Napo License Agreement upon Jaguar's uncured material breach or bankruptcy after certain notification periods.

As Jaguar announced on January 31, 2017, Jaguar and Elanco US Inc., a subsidiary of Eli Lilly and Company, have signed an agreement to license, develop, co-promote, and commercialize Canalevia, Jaguar's drug product candidate under investigation for treatment of acute diarrhea and CID in dogs. The agreement grants Elanco exclusive global rights to Canalevia for use in companion animals.

Patent Portfolio

Under the Napo License Agreement, Jaguar has exclusive rights in the veterinary field to an international patent family related to International Patent Application WO1998/16111. The patents and patent applications in this family are directed to enteric protected formulations of proanthocyanidin polymers isolated from *Croton spp* or *Calophyllum spp.* (such as crofelemer and Neonorm), and methods of treating watery diarrhea using the enteric protected formulations for both human and veterinary uses. As such, the patents and patent applications of this family cover certain formulations of crofelemer, including Canalevia, as well as the standardized botanical extract in Neonorm, and methods of treating diarrhea using these formulations. There are three U.S. patents and a pending U.S. patent application in this family, including, US 7,323,195, which has a term until at least June 7, 2018, US 7,341,744, which has a term until at least January 11, 2018, and US 8,574,634, which has a term until at least January 11, 2018. The term of one of US 7,323,195 or US 7,341,744 may be extended to June 2021 and December 2020, respectively, to account for regulatory delay in obtaining human

Table of Contents

marketing approval for crofelemer (such potential extensions have been filed for and only one of the patents can be extended). Patent protection for enteric protected formulations of crofelemer and methods of use has also been obtained outside the United States, including in Europe, Australia, Canada, India, Japan, Korea, Mexico, New Zealand and Taiwan, with terms extending until at least October 14, 2017 in these jurisdictions. In particular, European patent EP 0 935 417 and Japanese patent no. 4195728 provide protection for enteric protected formulations of crofelemer and the standardized botanical extract in Neonorm in Europe and Japan, respectively, with terms that extend until at least October 14, 2017.

The patents and patent applications Jaguar licensed from Napo, or the Napo Patents, which cover both human and veterinary uses, were previously licensed by Napo to Salix for certain fields of human use. On March 4, 2016, Napo and Salix settled litigation and all rights to crofelemer and Mytesi (formerly known as Fulyzaq) were returned to Napo and the collaboration agreement between Salix and Napo, or the Salix Collaboration Agreement, was terminated. Napo has the responsibility to file, prosecute and maintain the Napo Patents. As a result, under the Napo License Agreement, Jaguar only has the right to maintain any issued patents within the Napo Patents that are not maintained in accordance with the responsibilities of Napo. There are three issued Napo Patents in the United States that cover, collectively, enteric protected formulations of proanthocyanidin polymers isolated from *Croton spp.* and methods of treating watery diarrhea using the enteric protected formulations for both human and veterinary uses.

Jaguar has filed and have currently pending four applications under the PCT, four U.S. non-provisional patent applications and three provisional patent applications relating to veterinary uses of *Croton* proanthocyanidin polymer compositions, including crofelemer, Neonorm and Canalevia, and product combinations under development. These applications are directed to treatment of watery diarrhea in newborn and young animals, including methods of improving mortality and weight gain in newborn animals, treatment of stress-induced diarrhea in animals, and treatment of watery diarrhea caused by salmonella in animals. These applications also focus on the treatment of diarrhea in companion animals such as dogs and cats. In addition, an application has been submitted for the treatment of ulcers and related symptoms in animals with an emphasis on ulcers in horses. An application has also been filed on a surprising prebiotic effect of crofelemer in bovine and other animal species based on unexpected research findings that indicate a prebiotic enhancement of the gut bacteria in animals. One other patent application has been filed combining crofelemer with rifaximin, a non-absorbed antibiotic for the treatment of bacteria induced diarrhea in multiple animal species. Applications have been filed relating to treatment of porcine epidemic virus in piglets and treatment of diarrhea in livestock with a formulation that is not enteric protected. Patents that may issue based upon applications filed claiming benefit of these provisional patent applications should have terms that extend until at least May 2035.

Jaguar has two issued US patents licensed exclusively from Napo for veterinary use, covering NP-500 and its use. NP-500 is the API in Jaguar's drug product candidates to treat and manage diseases related to insulin-resistance, such as obesity-related metabolic dysfunction in dogs and cats, diabetes mellitus, and potentially equine laminitis. The two NP-500 patents claim benefit to a provisional application submitted to the USPTO by Napo in April 2011. Per the terms of the license agreement between Napo and Jaguar, Jaguar has an exclusive license to these intellectual properties for all veterinary treatment uses and indications for all species of animals except humans.

Trademarks

Jaguar plans to market its products under a trademark or trademarks it selects and it will own all rights, title and interest, including all goodwill, associated with such trademarks.

Table of Contents

Government Regulation

The development, approval and sale of animal health products are governed by the laws and regulations of each country in which Jaguar intends to seek approval, where necessary, to market and subsequently sell its prescription drug and non-drug products. To comply with these regulatory requirements, Jaguar is establishing processes and resources to provide oversight of the development, approval processes and launch of its products and to position those products in order to gain market share in each respective market.

United States

Certain federal regulatory agencies are charged with oversight and regulatory authority of animal health products in the United States. These agencies, depending on the product and its intended use may include the FDA, the USDA and the Environmental Protection Agency. In addition, the Drug Enforcement Administration regulates animal therapeutics that are classified as controlled substances. In addition, the Federal Trade Commission may in the case of non-drug products, regulate the marketing and advertising claims being made.

The approval of prescription drugs intended for animal use is regulated by the FDA's Center for Veterinary Medicine, or CVM. The CVM consists of six offices that work together to, in part, approve new drugs for commercialization and thereafter monitor those commercialized drugs once in the market. The Office of New Animal Drug Evaluation, or ONADE, is the lead office for reviewing novel drug candidates. Jaguar, as the sponsor of a novel drug candidate, commences the development and approval process by initiating communication with the ONADE and opening an INAD file. As part of this process, Jaguar will also schedule a discussion of the novel drug's development plan in order to obtain agreement from the CVM for the number, type and design of studies needed to obtain FDA approval of the novel drug.

As required by the FDA, new animal drug products must obtain marketing approval through the NADA process. Under the Administrative New Animal Drug Application, or Administrative NADA, process, a sponsor can engage in a phased submission of the required technical sections of an NADA, known as a rolling NADA, as opposed to submitting the entire application at once with a standard NADA. The requirements for all NADAs are the same regardless of whether a sponsor chooses the rolling NADA or the standard NADA submission. Under the phased review, once all technical sections have been submitted and reviewed, the sponsor submits an Administrative NADA to reflect that all technical sections of the NADA have been submitted and reviewed, each such technical section meets the requirements for approval and the CVM has issued technical section complete letters for each technical section. The phased review and Administrative NADA allow a drug sponsor to engage with the FDA as to each technical section to ensure that each section meets all requirements prior to submission of the application for approval. Phasing of NADA submissions is a voluntary process.

Once the tasks set forth in the development plan have been completed, including the clinical work as well as the chemistry and manufacturing work (feasibility, validation and stability of the drug inclusive), Jaguar, as the novel drug sponsor will need to provide to the FDA through the application process, information as to the safety and efficacy of the drug candidate, and, if needed, human food safety studies. These food safety studies are only required for drugs intended for use in production animals, and Jaguar currently has no plans to develop drugs for production animals. Additionally, the application will contain a module on CMC, which describes the plan for manufacturing the drug including the API, the final formulation, where it will be made, how it will be made, how the drug will be packaged, how it can be stored, the conditions required for storage and how long it can be stored before expiry. A major part of the CMC section is the analysis Jaguar employs to ensure that the manufactured drug is of a high quality, is consistently manufactured under cGMP and is stable. Other significant components to the application Jaguar has to complete before receiving drug approval

Table of Contents

includes a draft label that will list specific information such as dosing information, intended use, warnings, directions for use, and other information as required by the regulations. The package insert that will contain information on studies, warnings, drug interactions, intended use and dosing is considered part of the label in addition to that which is adhering to the container itself. The CVM ensures that the labeling provides all the necessary information to use the drug safely and effectively, and that it clearly discloses the risks associated with the drug.

MUMS Designation

The Minor Use and Minor Species Animal Health Act, or MUMS Act, became effective in August 2004. The purpose of the MUMS Act was twofold: first, to encourage the development and availability of more animal drugs that are intended to be used in a major species defined as dogs, cats, cattle, horses, chickens, turkeys and pigs to treat diseases which occur infrequently or in limited geographic areas, therefore having an impact on a smaller number of animals on a yearly basis; and second, to encourage the development and availability of animal drugs for use in minor species (defined as all animals other than humans that are not one of the major species). The drug sponsor may seek conditional approval of the drug product provided the Office of Minor Use Minor Species, or "OMUMS" acknowledges that the intended use fits within a small number of animals treated per annum. A drug does not have to be designated to be eligible for conditional approval, however if OMUMS designates a MUMS drug, certain incentives and exclusivities are available to the sponsor. The MUMS designation is modeled on the orphan drug designation for human drug development and has certain financial incentives available to encourage MUMS drug development such as the availability of grants to help with the cost of the MUMS drug development. Also, drug developers of MUMS drugs are eligible to apply for a waiver of the user fees once the MUMS designation has been given by OMUMS. Jaguar believes that it qualifies for MUMS designation for Canalevia as a minor use in a major species because the estimated total number of dogs in the United States affected by CID is less than 70,000. Jaguar also believes that Canalevia will qualify for MUMS designation for EID because, in Jaguar's estimate, the total number of dogs in the United States affected by EID on an annual basis is less than 70,000. To obtain conditional approval of a MUMS drug, the company must submit CMC and safety data similar to that required for an NADA, as well as data suggesting a reasonable expectation of effectiveness. After the submission and the review of the application, the FDA through the CVM can then grant a conditional approval (CA-1). This approval allows for a commercialization of the product, while the sponsor continues to collect the substantial evidence of effectiveness required for a full NADA approval. The sponsor has up to five years to demonstrate substantial evidence of effectiveness for a previously conditionally approved drug. Ideally, MUMS designation helps move the product forward in development; however, it may not shorten the time to full commercialization. A sponsor that gains approval or conditional approval for a MUMS designated drug receives seven years of marketing exclusivity.

Protocol Concurrence

As Jaguar announced in April 2016, it obtained protocol concurrence from the FDA for its pivotal trial of Canalevia that it initiated in December 2015 for acute diarrhea in dogs. Jaguar plans to pursue protocol concurrences from the FDA for future pivotal trials in other indications. Under this process, a protocol is submitted to the FDA voluntarily by a drug sponsor. The FDA review of the protocol for a pivotal study makes it more likely that the study will generate information the sponsor needs to demonstrate whether the drug is safe and effective for its intended use. It creates an expectation by the sponsor that the FDA will not later alter its perspectives on these issues unless public or animal health concerns appear that were not recognized at the time of protocol assessment. Even if FDA issues a protocol concurrence, ultimate approval of an NADA by the FDA is not guaranteed because a final determination that the agreed-upon protocol satisfies a specific objective, such as the demonstration of efficacy, or supports an approval decision, will be based on a complete review of all the data submitted

Table of Contents

to the FDA. Even if Jaguar were to obtain protocol concurrence, such concurrence does not guarantee that the results of the study will support a particular finding or approval of the new drug.

Marketing Exclusivity

Jaguar is currently planning on seeking MUMS designation for some of its prescription drug products and if it receives such a designation, it will be entitled to a seven-year marketing exclusivity, which means that it will face no competition from another sponsor marketing the same drug in the same dosage form for the same intended use. If Jaguar were to lose such designation or not receive such designation but its application as a new animal drug is found to be a new chemical entity that meets the criteria described by the FDA, Jaguar would be entitled to a five-year marketing exclusivity. In order to receive this five-year exclusivity, the FDA would have to find in its approval of Jaguar's application that Jaguar's NADA contains an API not previously approved in another application, that the application itself is an original application, not a supplemental application, and that Jaguar's application included the following studies: one or more investigations to demonstrate substantial evidence of effectiveness of the drug for which Jaguar is seeking approval; animal safety studies and human food safety studies (where applicable). If the NADA is seeking approval of a drug for which Jaguar has received conditional approval, Jaguar, upon approval would still be entitled to a five-year marketing exclusivity provided it meets the criteria as set forth above. If however, Jaguar's NADA is for a drug for which the FDA has determined that the drug contains an API that has previously been approved, regardless of whether the original approval was for use in humans or not, Jaguar may only be entitled to a three-year marketing exclusivity provided that the NADA is an original, not supplemental, application and contains both safety and efficacy studies demonstrating the safety and efficacy of the drug which is the subject of the application. Jaguar has received MUMS designation for Canalevia for the indication of Chemotherapy-Induced Diarrhea, or CID, in dogs. Additionally, Jaguar has submitted a formal request to the U.S. Food & Drug Administration's Center for Veterinary Medicine for a determination about whether Canalevia qualifies as a "minor use", per the requirements of the MUMS Act, for the indication of EID in dogs.

European Union

The European Union, or EU, definition of a veterinary medicinal product closely matches the definition of an animal drug in the United States. In the EU, a company can market a veterinary medicinal product only after a marketing authorization has been issued by an EU member state, (*i.e.*, approval on a country-by-country basis) or by the EU Commission through the European Medicines Agency, or the EMA. Before the EU member state or the EU Commission issues marketing authorization, Jaguar must submit a marketing authorization application, known as the dossier. The dossier includes data from studies showing the product's quality, safety, and efficacy and is similar to an NADA filed with the FDA.

For an animal drug, the Committee for Medicinal Products for Veterinary Use, or CVMP, is responsible for the scientific evaluation. Experts from all EU member states are on the CVMP. The Rapporteur, or lead reviewer on the dossier, prepares an overview of the committee's scientific evaluation, called the CVMP Assessment Report.

The CVMP Assessment Report:

summarizes the data submitted by the company on the product's quality, safety, and efficacy;

explains the assessment done by the CVMP to support the committee's recommendation to the EU Commission to issue a marketing authorization; and

is the basis for the European Public Assessment Report published on the EMA's website.

Table of Contents

Labeling

The FDA plays a significant role in regulating the labeling, advertising and promotion of animal drugs. This is also true of regulatory agencies in the EU and other territories. In addition, advertising and promotion of animal health products is controlled by regulations in many countries. These rules generally restrict advertising and promotion to those claims and uses that have been reviewed and approved by the applicable agency. Jaguar will conduct a review of advertising and promotional material for compliance with the local and regional requirements in the markets where it eventually may sell its product candidates.

Jaguar's non-prescription products will be labeled in accordance with the health guidelines outlined by the National Animal Supplements Council, an industry organization that sets industry standards for certain non-prescription animal products, including but not limited to product labeling.

Other Regulatory Considerations

Jaguar believes regulatory rules relating to human food safety, food additives, or drug residues in food will not apply to the products it currently is developing because its prescription drug product candidates are not intended for use in production animals, with the exception of horses, which qualify as food animals in Europe and Canada; and its non-prescription products are not regulated by section 201(g) of the Federal Food, Drug, and Cosmetic Act, which the FDA is authorized to administer.

Jaguar's prescription drug product candidates currently in development, if approved, may eventually face generic competition in the United States and in the EU after the period of exclusivity has expired. In the United States, a generic animal drug may be approved pursuant to an abbreviated new animal drug application, or ANADA. With an ANADA, a generic applicant is not subject to the submission of new clinical and safety data but instead must only show that the proposed generic product is a copy of the novel drug product, and bioequivalent to the approved novel product. However, if Jaguar's product candidates are the first approved by the FDA or the EMA as applicable for use in animals, they will be eligible for a five-year marketing exclusivity in the United States and 10 years in the EU thereby prohibiting generic entry into the market. If the product has MUMS designation it has a seven-year marketing exclusivity.

Jaguar does not believe that its non-prescription products are currently subject to regulation in the United States. The FDA's Center for Veterinary Medicine only regulates those animal supplements that fall within the FDA's definition of an animal drug, food or feed additive. The Federal Food Drug and Cosmetic Act defines food as "articles used for food or drink for man or other animals and articles used as components of any such article." Animal foods are not subject to pre-market approval and are designed to provide a nutritive purpose to the animals that receive them. Feed additives are defined as those articles that are added to an animal's feed or water as illustrated by the guidance documents. Jaguar's non-prescription products are not added to food, are not ingredients in food nor are they added to any animal's drinking water. Therefore, Jaguar's non-prescription products do not fall within the definition of a food or feed additive. The FDA seeks to regulate such supplements as food or food additives depending on the intended use of the product. The intended use is demonstrated by how the article is included in a food, or added to the animals' intake (*i.e.*, through its drinking water). If the intended use of the product does not fall within the proscribed use making the product a food, it cannot be regulated as a food. There is no intent to make Jaguar's non-prescription products a component of an animal food, either directly or indirectly. A feed additive is a product that is added to a feed for any reason including the top dressing of an already prepared feed. Some additives, such as certain forage, are deemed to be Generally Recognized as Safe, or GRAS, and therefore, not subject to a feed Additive Petition approval prior to use. However, the substances deemed GRAS are generally those that are recognized as providing nutrients as a food does. Jaguar does not believe that its

Table of Contents

non-prescription products fit within this framework either. Finally, a new animal drug refers to drugs intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in animals. Jaguar's non-prescription products are not intended to diagnose, cure, mitigate, treat or prevent disease and therefore, do not fit within the definition of an animal drug. Its non-prescription products are intended to support a healthy gut, support fluid retention, and normalize stool formation in animals suffering from scours. Additionally, because a previously marketed human formulation of the botanical extract in Jaguar's non-prescription products was considered a dietary supplement subject to the Dietary Supplement Health and Education Act of 1994 (and not regulated as a drug by the FDA), Jaguar does not believe that the FDA would regulate the animal formulation used in Jaguar's non-prescription products in a different manner. Jaguar does not believe that its non-prescription products fit the definition of an animal drug, food or food additive and therefore are not regulated by the FDA at this time.

In addition to the foregoing, Jaguar may be subject to state, federal and foreign healthcare and/or veterinary medicine laws, including but not limited to anti-kickback laws, as Jaguar may from time to time enter consulting and other financial arrangements with veterinarians, who may prescribe or recommend Jaguar's products. If Jaguar's financial relationships with veterinarians are found to be in violation of such laws that apply to Jaguar, Jaguar may be subject to penalties.

Employees

As of December 31, 2016, Jaguar had 23 employees. Of Jaguar's employees, eight hold D.V.M. or Ph.D. degrees and fifteen of its employees are engaged in research and development activities. None of Jaguar's employees are represented by labor unions or covered by collective bargaining agreements.

Description of Properties

Jaguar's corporate headquarters are located in San Francisco, California, where Jaguar subleases 6,008 rentable square feet of office space from SeeChange Health Management Company, Inc. Jaguar's sublease agreement expires on August 31, 2018. Jaguar believes that its existing facilities are adequate for its near-term needs. Jaguar believes that suitable additional or alternative space would be available if required in the future on commercially reasonable terms if Jaguar is not able to convert its current sublease to a lease by August 31, 2018 on commercially reasonable terms.

Table of Contents

NAPO BUSINESS

Overview

Napo Pharmaceuticals, Inc. ("Napo") focuses on the development and commercialization of proprietary pharmaceuticals for the global marketplace from plants traditionally used in rainforest areas. In May 2016, the New Drug Application (NDA) and commercial rights for human applications of crofelemer (Mytesi) previously licensed to Salix Pharmaceuticals, Inc. ("Salix") were transferred to Napo. In October 2016 Napo launched Mytesi (formerly known as Fulyzaq), a human drug approved by the U.S. FDA for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy (ART). The active pharmaceutical ingredient (API) in Mytesi is crofelemer, Napo's proprietary, patented gastrointestinal anti-secretory agent sustainably harvested from the rainforest.

According to the World Health Organization, there are nearly 1.7 billion cases of diarrheal disease globally every year. Although not all types of diarrhea are secretory in nature, Napo views the current, initial approval of Mytesi as the opening of the door to an important pipeline demonstrating approval by the FDA of the Chemistry, Manufacturing and Controls (CMC) for this natural product, as well as acknowledgement by the FDA of the safety of the product for chronic use for the approved indication. Napo is continuing development of Mytesi for other antidiarrheal indications, with investigational studies completed in irritable bowel syndrome, cholera, traveler's diarrhea, and in pediatric patients, and two investigator-initiated trials in chemotherapy-induced diarrhea, one of which is currently enrolling patients. Diarrhea is a common adverse event seen with chemotherapy agents typically used in breast and colon cancers, and in particular in the more recently introduced therapeutic classes of epidermal growth factor receptor (EGFR) monoclonal antibodies and tyrosine kinase inhibitors (TKI) often used for chronic management of cancer. The increased need for and use of these agents has made diarrhea one of the most disabling issues for cancer patients. Crofelemer offers the potential for an appropriate mechanism of action against these likely secretory diarrheas and has prompted interest among physicians concerned about this diarrheal symptom, stimulating the aforementioned investigator-initiated trials.

Napo is seeking partnerships outside the United States for the above indications, while focusing on development, and commercial access in the United States directly. Napo is also focused on investigating SB-300 for various gastrointestinal indications. SB-300 is a distinct and proprietary Napo pharmaceutical formulation of a standardized botanical extract, also sustainably derived from the *Croton lechleri* tree.

Napo believes SB-300, which has the same mechanism of action as crofelemer and is less costly to produce, may support efforts to receive a priority review voucher from the U.S. FDA for a cholera indication. Priority review vouchers are granted by the FDA to drug developers as an incentive to develop treatments for neglected diseases and rare pediatric diseases. Additionally, Napo believes SB-300 represents a long-term pipeline opportunity as a second-generation anti-secretory agent, on a global basis, for diarrheal illnesses such as cholera especially in resource-constrained countries where cost of goods is a factor, in part, because requirements often exist in such regions for drug prices to decrease annually.

Napo's portfolio development strategy is based on identifying indications that are potentially high-value because they address important medical needs that are significantly or globally unmet, and then strategically sequencing indication development priorities, second-generation product pipeline development, and partnering goals on a global basis.

Napo's technology for proprietary gastrointestinal disease products is central to both Napo and Jaguar. Crofelemer is also the API in Canalevia, Jaguar's lead prescription drug product candidate, intended for the treatment of various forms of diarrhea in dogs. Jaguar is planning a multi-site pilot

Table of Contents

study of Canalevia in dogs with malignancies treated with toceranib phosphate, another TKI, with diarrhea as a frequent adverse effect. Jaguar and Napo expect that a merger of the two companies would play a significant and positive role in supporting the development of crofelemer to address the problem of chemotherapy-induced diarrhea in both humans and companion animals.

As Napo announced on February 28, 2017, it recently signed an agreement with Alamo Pharma Services, Inc. for the establishment and management of a national sales team for Mytesi in the second quarter, 2017, and Napo is deploying a sampling program for Mytesi so patients can start therapy immediately. Under the terms of the agreement, Alamo will provide a team of shared sales representatives to supplement the dedicated Napo representatives who will promote and sample Mytesi in key metropolitan areas throughout the United States. The sales representatives will reach out to doctors who have large populations of HIV patients and, therefore, are high-volume prescribers of antiretroviral therapies.

Napo and Jaguar estimate the potential U.S. market for Mytesi to be approximately \$100 million in gross annual sales, and forecast that Mytesi will generate approximately \$7.0 million in net sales in 2017, with the greatest impact on prescription growth coincident with the deployment of the sales force and sampling program.

Napo's management team has significant experience in gastrointestinal product development. This experience includes the development of crofelemer for human use, from discovery and preclinical and clinical toxicity studies, including the existing animal studies to be used by Jaguar for Canalevia regulatory approvals, through human clinical development and commercial manufacturing and supply.

Mytesi Clinical Data

Mytesi has been clinically proven to have:

Minimal absorption, with plasma concentrations below the level of detection

No clinically relevant drug-drug interactions

No effect on viral load or CD4 counts

Adverse events comparable to those with placebo

The efficacy of Mytesi 125-mg delayed-release tablets twice daily was evaluated in a randomized, double-blind, placebo-controlled (1 month) and placebo-free (5 month), multicenter study (the ADVENT trial). The study enrolled HIV-positive patients on stable ART with a history of diarrhea for 1 month or more. In the Mytesi 125-mg twice-daily group, a significantly larger proportion of patients achieved a reduction in watery stools per week vs placebo 18% vs 8%, $P < 0.01$.

By week 4 of the study, 78% of patients in the Mytesi BID group experienced a decrease in watery stools. Among these patients that experienced a decrease, 61% had at least a 50% decrease in watery stools. By week 20, 89% of patients in the Mytesi BID group experienced a decrease in watery stools. Among these patients that experienced a decrease, 83% had at least a 50% decrease in watery stools, and over half of patients had no watery stools at all (100% decrease).

Important Safety Information About Mytesi

Mytesi (crofelemer 125mg delayed-release tablets) is an antidiarrheal indicated for the symptomatic relief of noninfectious diarrhea in adult patients with HIV/AIDS on antiretroviral therapy (ART). Mytesi is not indicated for the treatment of infectious diarrhea. Rule out infectious etiologies of diarrhea before starting Mytesi. If infectious etiologies are not considered, there is a risk that patients with infectious etiologies will not receive the appropriate therapy and their disease may worsen. In clinical studies, the most common adverse reactions occurring at a rate greater than placebo were

Table of Contents

upper respiratory tract infection (5.7%), bronchitis (3.9%), cough (3.5%), flatulence (3.1%), and increased bilirubin (3.1%).

Product Pipeline

Napo is developing a pipeline of prescription drug product candidates to address unmet needs in gastrointestinal health. Napo's pipeline currently includes prescription drug product candidates for 7 follow-on indications, several of which are backed by strong Phase 2 evidence.

Prescription Drug Product Candidates

Product Candidates	Indication	Completed Milestones	Anticipated Near-Term Milestones
Formulation of crofelemer	Chemotherapy-induced diarrhea (CID)	Two investigator-initiated clinical trials funded by Genentech, Roche & Puma	Special Protocol Assessment (SPA) discussion
Formulation of crofelemer	Institutional diarrhea	Safety	Protocol discussion with FDA
Formulation of crofelemer	Secretory diarrhea	Safety	Support for Institutional diarrhea protocol
Formulation of crofelemer	Irritable Bowel Syndrome diarrhea predominant (IBS-D)	Multiple Phase 2 studies completed Phase I study	Partner discussions
Formulation of crofelemer	Pediatric general watery diarrhea	Two significant Phase 2 studies completed Phase I study	Formulation optimization
Formulation of crofelemer	Cholera/general watery diarrhea	Published trial in cholera patients	File for Orphan drug status and development plan with FDA for Channelopathies
Formulation of crofelemer	Orphan Drug (Channelopathies)	Phase I study	Proof-of-Concept 2017
SB-300	Second-generation anti-secretory agent for multiple indications including cholera/general watery diarrhea	Animal and human studies in secretory diarrheas; successful cholera trial design for anti-secretory mechanism of action;	CMC development for SB-300 & Pre-clinical

Table of Contents

The following diagram illustrates the mechanism of action of Napo's gastrointestinal drug products and drug product candidates, which normalize chloride and water flow and transit time of fluids within the intestinal lumen.

Business Strategy

Napo's goal is to become a leading gastrointestinal health company with first-in-class products that address unmet medical needs in the global gastrointestinal market. To accomplish this goal, Napo plans to:

Leverage Napo's significant gastrointestinal knowledge, experience and intellectual property portfolio to develop a follow-on line of crofelemer and anti-secretory based products.

Napo's management team collectively has more than 100 years of experience in the development of gastrointestinal prescription drug and non-prescription products. This experience covers all aspects of product development, including discovery, preclinical and clinical development and regulatory strategy.

Establish commercial capabilities, including third-party sales and distribution networks and Napo's own targeted commercial efforts.

As Napo announced on February 28, 2017, it recently signed an agreement with Alamo Pharma Services, Inc. for the establishment and management of a national sales team for Mytesi. Under the terms of the agreement, Alamo will provide a team of shared sales representatives to supplement the dedicated Napo representatives who will promote and sample Mytesi in key metropolitan areas throughout the United States. The sales representatives will reach out to doctors who have large populations of HIV patients and, therefore, are high-volume prescribers of antiretroviral therapies.

Alamo is a specialized provider of contract sales solutions to pharmaceutical and biotech companies headquartered in Doylestown, Pennsylvania. BexR, a full service kitting and pick pack sample fulfillment provider, will continue to offer telesales support for Mytesi, as BexR has since October 2016, to detail HIV healthcare providers in geographic areas not covered by sales representatives. Alamo and BexR are part of the Mission Family of Companies.

Napo believes that the establishment of an experienced pharmaceutical field sales team for Mytesi, supported by a telesales team, will allow Napo to reach many high-potential prescribers. Napo is also deploying a sampling program for Mytesi so patients can start therapy immediately. Based on its market research findings, Napo believes the key difference between current Mytesi prescribers and non-prescribers is awareness most have simply never heard about the product. Patient and prescriber surveys show that 1 in 5 HIV+ patients suffer from diarrhea.

Table of Contents

Napo and Jaguar estimate the potential U.S. market for Mytesi to be approximately \$100 million in gross annual sales, and forecast that Mytesi will generate approximately \$7.0 million in net sales in 2017, with the greatest impact on prescription growth coincident with the deployment of the sales force and sampling program.

Napo and Jaguar believe the medical need for Mytesi is significant, compelling, and unmet, and that patients are looking for something that works differently than the options currently available to resolve diarrhea. Clinical trials demonstrated that nearly 80 percent of Mytesi users experienced an improvement in their diarrhea over a four-week period. Initiation on a new antiretroviral therapy has been shown to cause diarrhea 15% of the time. Greater than 50% of the U.S. HIV population is aging, and living with the HIV virus in their gut for 10-plus years, causing chronic diarrhea.

Napo and Jaguar believe that, upon effectiveness of the merger, the two companies together are poised to realize a number of synergistic, value-adding benefits and an expanded pipeline of potential blockbuster human follow-on indications, a second generation anti-secretory agent, as well as a pipeline of important animal follow-on indications for Mytesi, upon which to build global partnerships.

Launch Napo's product candidates, if approved, leveraging the commercial capabilities and brand awareness Napo is currently building.

Napo's pipeline currently includes prescription drug product candidates for 7 follow-on indications, several of which are backed by strong Phase 2 evidence.

Expand to international markets.

As Napo works to expand its commercialization efforts, it is looking to leverage its global rights to Mytesi by seeking geographical collaboration outside the United States to develop and commercialize the drug worldwide, while Napo remains focused on and in control of the U.S. market.

Napo's portfolio development strategy is based on identifying indications that are potentially high-value because they address important medical needs that are significantly or globally unmet, and then strategically sequencing indication development priorities, second-generation product pipeline development, and partnering goals on a global basis.

Certain markets have strong international synergies benefiting market awareness and demand. Napo may also enter into partnerships that include payment of upfront licensing fees for its products and product candidates for markets outside the United States where appropriate.

Products in Development

Chemotherapy-induced Diarrhea (CID)

CID is a common problem with a relevant mechanism for crofelemer.

National Cancer Institute Criteria for Grading Severity of Diarrhea

	Grade 1	Grade 2	Grade 3	Grade 4
Patients without a colostomy	Increase of <4 stools per day over pretreatment	Increase of 4 to 6 stools per day or nocturnal stools	Increase of ≥7 stools per day or incontinence; need for parenteral support for hydration	Physiologic consequences requiring intensive care; hemodynamic collapse

According to data appearing in "Treatment Guidelines for CID" in the April 2004 issue of *Gastroenterology and Endoscopy News*, diarrhea is the most common adverse event reported in

Table of Contents

chemotherapy patients. Napo is continuing development of Mytesi for this important and unmet medical need, and two planned investigator-initiated trials of the product are underway in breast cancer patients suffering from CID.

Diarrhea is a common adverse event seen with chemotherapy agents in the therapeutic classes of epidermal growth factor receptor (EGFR) tyrosine kinase inhibitors (TKI's) and EGFR monoclonal antibodies (for breast, lung, and other malignancies). The increased need for and use of these agents has made diarrhea one of the most disabling issues for cancer patients. Crofelemer offers the potential for an appropriate mechanism of action against this likely secretory diarrhea and has prompted interest among physicians concerned about this diarrheal symptom, stimulating the aforementioned investigator-initiated trials. Diarrhea is also a common adverse event seen with chemotherapy agents used in colorectal and gastric cancers, and chronic maintenance chemotherapy. There are currently no anti-diarrhea agents approved generally for chemo-therapy induced diarrhea. The FDA recently approved XERMELO (telotristat ethyl, a tryptophan hydroxylase inhibitor) tablets in combination with somatostatin analog (SSA) therapy for the narrow indications of treatment of adults with carcinoid syndrome diarrhea that SSA therapy alone has inadequately controlled.

Clinical Studies

A study titled *HALT-D: DiarrHeA Prevention and ProphyLaxis with Crofelemer in HER2 Positive Breast Cancer Patients Receiving Trastuzumab, Pertuzumab, and Docetaxel or Paclitaxel with or without Carboplatin* is currently underway in conjunction with Georgetown University. The primary objective of the study is to characterize the incidence and severity of diarrhea in patients receiving investigational therapy in the setting of prophylactic anti-diarrheal management.

A second study, titled *An open label study to characterize the incidence and severity of diarrhea in patients with early stage HER2+ breast cancer treated with adjuvant trastuzumab and neratinib followed by neratinib monotherapy, and intensive anti-diarrhea prophylaxis*, is currently underway in conjunction with the University of California at San Francisco. The study is designed to evaluate crofelemer as a salvage anti-diarrheal therapy used with the investigational breast cancer agent neratinib. The primary objective is to characterize the incidence and severity of diarrhea in patients with early stage breast cancer receiving adjuvant trastuzumab and neratinib followed by 1 year of neratinib monotherapy in the setting of prophylactic anti-diarrheal management. The secondary objectives are to evaluate the activity of crofelemer as a rescue anti-diarrheal medication; to assess neratinib adherence, holds, delays, and early discontinuation throughout the course of study therapy, which includes patients receiving neratinib for >1 year; and to assess overall toxicity including constipation and cardiac toxicity with concomitant neratinib and trastuzumab.

Institutional Diarrhea

Patients in medical institutions such as hospitals often experience diarrhea following infection with *Clostridium difficile*, an anaerobic bacillus shed in feces. According to the Centers for Disease Control and Prevention of the U.S. Department of Health & Human Services, any surface, device, or material (e.g., commodes, bathing tubs, and electronic rectal thermometers) that becomes contaminated with feces may serve as a reservoir for the *C. difficile* spores, which are transferred to patients mainly via the hands of healthcare personnel who have touched a contaminated surface or item. Napo believes development of an approved formulation of crofelemer for use in *C. difficile* has the potential to help patients infected with *C. difficile* leave the hospital sooner, help keep patients infected with *C. difficile* out of the hospital, and aid in controlling *C. difficile* contagion in institutional settings, which would also represent a significant economic benefit.

Table of Contents

Clinical Study

Napo has completed safety studies with crofelemer, and a development plan for Phase 2 and pivotal studies is expected to be put in place in 2018-2019. Napo plans to meet with FDA regarding the design of trials that may enroll just *C. difficile* patients or trials that would enroll any patient experiencing severe diarrhea in a medical institution where infection with *C. difficile* is common.

Secretory Diarrhea

Secretory diarrhea occurs when the intestine does not complete absorption of electrolytes and water from luminal contents. This can happen when a nonabsorbable, osmotically active substance is ingested ("osmotic diarrhea") or when electrolyte absorption is impaired ("secretory diarrhea"). Most cases of acute and chronic diarrhea are due to the latter mechanism. Secretory diarrhea can result from bacterial toxins, luminal secretagogues (such as bile acids or laxatives), reduced absorptive surface area caused by disease or resection, circulating secretagogues (such as various hormones, drugs, and poisons), and medical problems that compromise regulation of intestinal function. These studies support the normalizing aspect of the mechanism of action, regardless of the cause of the diarrhea, and are supportive of the high-valued economic setting in institutionalized diarrhea described above.

Clinical Study

Napo has completed safety studies and multiple Phase 2 studies for secretory diarrhea as well.

Irritable Bowel Syndrome diarrhea predominant (IBS-D)

Diarrhea is a common symptom of irritable bowel syndrome (IBS), a frustrating, underdiagnosed and undertreated condition. IBS-D is a subtype characterized mainly by loose or watery stools at least 25 percent of the time. According to the U.S. FDA, studies estimate that IBS affects 10 to 15 percent of adults in the United States.

Abdominal pain is the key symptom of IBS, and the pain, which is associated with a change in stool frequency or consistency, can be severe. To improve the diagnosis and outcomes for IBS patients and to update clinicians on the latest research, Dr. William Chey, a gastroenterologist and professor of medicine and nutrition sciences at the University of Michigan, along with an international team of collaborators, compiled *Rome IV*, a updated compendium of diagnostic criteria on functional GI disorders such IBS. *Rome IV* contains a chapter titled Centrally Mediated Disorders of Gastrointestinal Pain.

Although new agents for IBS-D have come on the market,, there is an unmet medical for long-term, safe management of the abdominal pain associated with IBS-D. Mytesi has been demonstrated to be safe for chronic use, and two studies provide statistically significant results of crofelemer use for abdominal pain in women.

The largest group of IBS sufferers are those with the subtype referred to as IBS-M (mixed diarrhea and constipation).IBS-M is also referred to as IBS-A, because the condition often involves frequent alternating between IBS-D and IBS-C (constipation predominant). IBS-M is distressing for patients as well as difficult to diagnose and manage, and is often associated with pain and urgency as well as significant abdominal distension and bloating. No approved drugs currently exist for IBS-M. Leading gastroenterologists have stated that IBS-C drugs may cause diarrhea in an IBS-M patient, and an IBS-D drug may cause significant constipation. Napo therefore believes an opportunity exists for an IBS-M indication for Mytesi. Resultingly, and due to the demonstrated safety of Mytesi for chronic use and its demonstrated benefit for abdominal pain in women, Napo is considering expanding development efforts to evaluate the IBS-M indication.

Table of Contents

Clinical Study

Crofelemer has been tested in safety studies and two significant Phase 2 studies for IBS-D. Napo recognizes that patients suffering from IBS-D or IBS-M may require a polypharmaceutical approach to their lifetime management of the disease, and is therefore working to develop a low risk study designed to optimize efforts to develop an approved formulation to address these unmet medical needs.

Pediatric General Watery Diarrhea

According to the World Health Organization, diarrheal disease is the second leading cause of death in children under five years old, and is responsible for killing around 760,000 children every year. Diarrhea can last several days, and can deplete water and salts the body needs for survival. Most children and adults who die from diarrhea actually die from severe dehydration and fluid loss. Diarrhea is also a leading cause of malnutrition in children under five years old. Children who are malnourished or have impaired immunity are at high risk of life-threatening diarrhea. Clinical Study

Napo has completed a Phase 1 study in a pediatric population in children as young as 3 months of age for crofelemer.

Orphan Drug (Channelopathies)

Channelopathies are diseases caused by disturbed function of ion channel subunits or the proteins that regulate the units. These diseases may be either congenital, often resulting from a mutation or mutations in the encoding genes, or acquired, often resulting from autoimmune attack on an ion channel. In regions such as the United Arab Emirates and Saudi Arabia, genetic channelopathies occur with higher incidence as a result of consanguineous marriage.

Clinical Study

Napo has completed safety studies of crofelemer, and a proof-of-concept study is planned for this year. Napo intends to seek orphan drug status from the channelopathies indication. The mission of the FDA Office of Orphan Products Development is to advance the evaluation and development of products (drugs, biologics, devices, or medical foods) that demonstrate promise for the diagnosis and/or treatment of rare diseases or conditions.

Cholera/General Watery Diarrhea

According to the Centers for Disease Control and Prevention of the U.S. Department of Health & Human Services, Cholera is an acute, diarrheal illness caused by infection of the intestine with the bacterium *Vibrio cholerae*. An estimated 3-5 million cases and over 100,000 deaths occur each year around the world. The infection is often mild or without symptoms, but can sometimes be severe. Approximately one in 10 (5-10%) of infected persons will have severe disease characterized by profuse watery diarrhea, vomiting, and leg cramps. In these people, rapid loss of body fluids leads to dehydration and shock. Without treatment, death can occur within hours.

Napo is investigating SB-300 for the indication of cholera/general watery diarrhea. SB-300 is a distinct and proprietary Napo pharmaceutical formulation of a standardized botanical extract, also sustainably derived from the *Croton lechleri* tree. Napo believes SB-300 represents a long-term pipeline opportunity as a second-generation anti-secretory agent, on a global basis, for diarrheal illnesses such as cholera. Additionally, Napo believes SB-300, which has the same mechanism of action as crofelemer and is less costly to produce, may support efforts to receive a priority review voucher from the U.S. FDA for a cholera indication. Priority review vouchers are granted by the FDA to drug developers as an incentive to develop treatments for neglected diseases and rare pediatric diseases. If approved for this indication, SB-300 could serve as long-term pipeline anti-secretory agent for cholera/general watery

Table of Contents

diarrhea in geographies where cost of goods is a critical factor, for example, in resource-constrained regions and countries in which a requirement exists for drug prices to decrease annually.

Clinical Study

Napo has initiated CMC and has multiple animal and a human study in secretory diarrheas with SB-300. Napo has also completed a successful trial design for cholera with an anti-secretory mechanism of action.

Other Product Candidates and Development

Given crofelemer's normalizing function in the gut, Napo considers short bowel syndrome (SBS) and ulcerative colitis as additional potential areas for clinical development. SBS is a malabsorption disorder caused by a lack of a functional small intestine. The primary symptom is diarrhea, which can result in dehydration, malnutrition, and weight loss. Ulcerative colitis is a chronic disease of the large intestine, also known as the colon, in which the colon lining becomes inflamed and develops tiny open sores, or ulcers. The combination of inflammation and ulceration can cause abdominal discomfort and frequent emptying of the colon. According to the Crohn's & Colitis Foundation, approximately half of all patients with ulcerative colitis experience mild symptoms, and symptoms include persistent diarrhea accompanied by abdominal pain and blood in the stool.

Manufacturing

The plant material used to manufacture is crude plant latex, or CPL, extracted and purified from *Croton lechleri*, a widespread and naturally regenerating tree in the rainforest that is managed as part of sustainable harvesting programs. The tree is found in several South American countries and has been the focus of long-term sustainable harvesting research and development work. Napo's collaborating suppliers obtain CPL and arrange for the shipment of CPL to Napo's third party contract manufacturer.

Napo's third-party contract manufacturer, Glenmark Pharmaceuticals Ltd. (Glenmark), a research-driven, global, integrated pharmaceutical company, processes CPL into crofelemer utilizing a proprietary manufacturing process. The processing occurs at two FDA-approved Glenmark facilities. Additionally, Napo plans to establish a third processing site, which will be operated by Indena S.p.A., a Milan, Italy-based contract manufacturer dedicated to the identification, development and production of high-quality active principles derived from plants, for use in the pharmaceutical, health food and personal care industries. Indena has completed the required technology transfer and has equipment in place for pilot manufacturing.

Competition

To Napo's knowledge, there are currently no FDA-approved anti-secretory products, in particular which act locally in the gut with the chronic safety profile of crofelemer, in development or on the market. Crofelemer represents a new tool in gastro-intestinal disease management.

Distribution and Marketing Agreements

Napo has agreements in place with BexR, a distributor in Texas and as well as a marketing and commercialization advisory firm for the distribution, marketing and sale of Mytesi®, its FDA approved drug product for the systematic relief of non-infectious diarrhea in adult patients living with HIV/AIDS on antiretroviral therapy. The agreements compensate these parties with a percentage of net sales, as defined.

Table of Contents

Intellectual Property

Proprietary Library of Medicinal Plants

Napo possesses a proprietary library of more than 2,300 library medicinal plants.

Patent Portfolio

Napo owns a portfolio of patents and patent applications covering formulations of and methods of treatment with proanthocyanidin polymers isolated from *Croton* spp or *Calophyllum* spp., including MYTESI (crofelemer), formerly known as FULYZAQ. The patent family related to International Patent publication WO1998/16111 relates to enteric protected formulations of proanthocyanidin polymers isolated from *Croton* spp or *Calophyllum* spp., including crofelemer, and methods of treating watery diarrhea using these enteric protected formulation. There are three U.S. patents and a pending U.S. patent application in this family, including, US 7,323,195, which has a term until at least June 7, 2018, US 7,341,744, which has a term until at least January 11, 2018, and US 8,574,634, which has a term until at least January 11, 2018. The United States Patent and Trademark Office (USPTO) issued on December 16, 2006, a notice of recalculation of the patent term adjustment for US 7,341,744 for 842 days, for an expiration date of February 5, 2019; however, the USPTO has not issued a certificate of correction to correct the patent term adjustment accorded to this patent. In addition, on February 20, 2017, Napo has filed a Request for Reconsideration of the patent term adjustment of US 7,341,744, requesting recalculation resulting in 1032 days or, alternatively, 980 days of patent term adjustment. Napo has elected to extend the term of US 7,341,744 under 35 U.S.C. 156, and the United States Patent and Trademark Office has issued a Notice of Final Determination that the patent term extension for US 7,341,744 is 1075 days. Based upon the January 11, 2018 expiration date, the patent would be extended to June 2021, to account for regulatory delay in obtaining human marketing approval for crofelemer. Napo has requested that the USPTO not issue the final Patent Term Extension certificate until final resolution of the number of days of patent term adjustment accorded to US 7,341,744. Patent protection for enteric protected formulations of crofelemer and methods of use has also been obtained outside the United States, including in Europe, Australia, Canada, India, Japan, Korea, Mexico, New Zealand and Taiwan, with terms extending until October 14, 2017 in these jurisdictions. In particular, European patent EP 0 935 417 and Japanese patent no. 4195728 provide protection for enteric protected formulations of in Europe and Japan, respectively, with terms that extend until October 14, 2017.

Napo additional owns a family of patents arising from International Patent Application Publication WO2012058664 that cover methods of treating HIV associated diarrhea and HAART associated diarrhea with proanthocyanidin polymers isolated from *Croton* spp or *Calophyllum* spp., including crofelemer. In the U.S., there are two issued patents, US 8,962,680 and US 9,585,868, both of which expire October 31, 2031 and one pending application. Outside the US, patent protection for methods of treating HIV associated diarrhea has been obtained in Australia, Japan, Kenya, Kazakhstan, Russia, Ukraine, South Africa and Zimbabwe, with expiration dates of October 31, 2031, and Napo has pending applications in Brazil, Canada, China, Europe, Hong Kong, India, Japan, Mexico, and Malaysia. Napo also has patent families related to methods of treating diarrhea-predominant irritable bowel syndrome, constipation-predominant irritable bowel syndrome, and inflammatory bowel disease, familial adenomatous polyposis and colon cancer, with proanthocyanidin polymers isolated from *Croton* spp or *Calophyllum* spp., including crofelemer. In particular, for diarrhea-predominant irritable bowel syndrome, Napo has 1 issued US patent, which expires February 9, 2027, and 1 pending application, issued patents in Australia, Japan, South Korea, Mexico, New Zealand, Singapore, and Taiwan and pending applications in Bangladesh, Bolivia, Canada, Chile, Europe, Gulf States, Mexico, Panama, Peru, Paraguay, Thailand, and Taiwan, all of which are estimated to expire April 30, 2027; for constipation-predominant irritable bowel syndrome, Napo has 3 issued US patents, with terms of at least April 30, 2027, patents in Australia, Europe, Mexico, New Zealand, Singapore and pending

Table of Contents

applications in Canada, and India, all of which are estimated to expire April 30, 2027; and for inflammatory bowel disease, familial adenomatous polyposis and/or colon cancer, Napo has 1 issued US patent, which has an expiration date of October 9, 2029 and 1 pending applications, issued patents in Australia, Europe and a pending applications in Canada, which have estimated expiration dates of April 30, 2027.

Napo also co-owns with Glenmark, issued patents in India, South Africa and Eurasia patents that expire August 24, 2030, and cover a method of manufacturing with proanthocyanidin polymers isolated from *Croton* spp or *Calophyllum* spp., including crofelemer). Napo holds two US patents covering a formulation of NP-500 (nordihydroguaiaretic acid (NDGA)) and its use in treating a metabolic disorder that have terms until April 23, 2031 Napo has filed a PCT provisional application for the treatment of Chemotherapy induced diarrhea (CID) with crofelemer.

Trademarks

Mytesi is a registered trademark owned by Napo. Napo plans to market its products under a trademark or trademarks Napo will select and Napo will own all rights, title and interest, including all goodwill, associated with such trademarks.

License Agreements

License Agreement with Jaguar Animal Health, Inc.

On July 11, 2013, Napo entered into an option to license Napo's intellectual property and technology (the "Option Agreement") to Jaguar. Under the Option Agreement, upon the payment of \$100,000 in July 2013, Jaguar obtained an option for a period of two years to execute an exclusive worldwide license to Napo's intellectual property and technology to use for its animal health business. The option price was creditable against future license fees to be paid to Napo under the License Agreement (as defined below).

In January 2014, Jaguar exercised its option and entered into a license agreement (the "License Agreement") with Napo for an exclusive worldwide license to Napo's intellectual property and technology to permit Jaguar to develop, formulate, manufacture, market, use, offer for sale, sell, import, export, commercialize and distribute products for veterinary treatment uses and indications for all species of animals. Jaguar was originally obligated to pay a one-time non-refundable license fee of \$2,000,000, less the option fee of \$100,000. At the Jaguar's option, the license fee could have been paid in common stock. Milestone payments aggregating \$3,150,000 may also be due to Napo based on regulatory approvals of various veterinary products. In addition to the milestone payments, Jaguar will owe Napo an 8% royalty on annual net sales of products derived from the *Croton lechleri* tree, up to \$30,000,000 and then, a royalty of 10% on annual net sales of \$30,000,000 or more. Additionally, if any other products are developed, Jaguar will owe Napo a 2% royalty on annual net sales of pharmaceutical prescription products that are not derived from *Croton lechleri* and a 1% royalty on annual net sales of nonprescription products that are not derived from *Croton lechleri*. The royalty term expires at the longer of 10 years from the first sale of each individual product or when there is no longer a valid patent claim covering any of the products and a competitive product has entered the market. However, because an IPO of at least \$10,000,000 was consummated prior to December 31, 2015, the royalty was reduced to 2% of annual net sales of its prescription products derived from *Croton lechleri* and 1% of net sales of its nonprescription products derived from *Croton lechleri* and no milestone payment will be due and no royalties will be owed on any additional products developed.

The License Agreement also transferred to Jaguar certain materials and equipment.

Table of Contents

Jaguar has agreed under the License Agreement to defend, indemnify and hold Napo, its affiliates, and the officers, directors, employees, consultants and contractors of Napo harmless from and against any losses, costs, damages, liabilities, fees and expenses arising out of any third-party claim related to the Jaguar's gross negligence, breach of covenants or the manufacture, sale or use of the product or products.

In January 2015, the License Agreement was amended to decrease the one-time non-refundable license fee payable from \$2,000,000 to \$1,750,000 in exchange for acceleration of the payment of the fee. In 2015, payments totaling \$1,225,000 were made, with the balance of \$425,000 paid in the quarter ended March 31, 2016.

License Agreement with Glenmark Pharmaceuticals Limited

In 2005 Napo entered into a collaboration agreement with Glenmark Pharmaceuticals Limited (the Glenmark Collaboration Agreement) for the development of crofelemer for the indications of for HIV/ AIDS diarrhea, pediatric diarrhea and adult acute infectious diarrhea in approximately 140 countries outside of the United States, Japan, most EU countries and Japan. The Glenmark Collaboration Agreement provides for royalties to be paid to Napo based upon net sales of crofelemer derived products in the licensed territories.

Glenmark has obtained marketing approval for the crofelemer derived product for control and symptomatic relief of diarrhea in patients living with HIV/AIDS in two countries in Africa and two in South America. Two of these four countries have also approved the crofelemer derived product for control and symptomatic relief of diarrhea in patients with acute infectious diarrhea. Napo has not received any royalty income from these approvals nor is it aware of any sales made by Glenmark in its licensed territories.

License Agreement with Luye Pharmaceuticals, Inc.

In 2005, Napo entered into a license agreement with Luye Pharmaceuticals (Luye) for the development of crofelemer for the indications of HIV/AIDS diarrhea, pediatric diarrhea and adult acute infectious diarrhea for the People's Republic of China including Macao and Hong Kong. The license agreement provided for Napo to receive royalties on net sales of crofelemer derived products. To date, Luye has not developed crofelemer for any indications in its licensed territory and the Company has not received any royalty income from Luye.

Government Regulation

The development, approval and sale of gastrointestinal health products are governed by the laws and regulations of each country in which Napo intends to seek approval, where necessary, to market and subsequently sell its prescription products. To comply with these regulatory requirements, Napo is establishing processes and resources to provide oversight of the development, approval processes and launch of its products and to position those products in order to gain market share in each respective market.

Labeling

The FDA plays a significant role in regulating the labeling, advertising and promotion of drugs in the United States. This is also true of regulatory agencies in the EU and other territories. In addition, advertising and promotion of health products is controlled by regulations in many countries. These rules generally restrict advertising and promotion to those claims and uses that have been reviewed and approved by the applicable agency. Napo will conduct a review of advertising and promotional material for compliance with the local and regional requirements in the markets where Napo eventually may sell its product candidates.

Table of Contents

Employees

As of December 31, 2016, Napo had one employee. None of Napo's employees are represented by labor unions or covered by collective bargaining agreements.

Effective March 27, 2017, Napo named Dr. Pravin Chaturvedi, Napo's former Chief Scientific Officer, as the chair of Napo's Scientific Advisory Board. In this role, Dr. Chaturvedi will be responsible for providing direction on strategy, tactics and oversight to Napo's leadership team regarding advancing the development and commercialization of the Napo drug pipeline, including, but not limited to, Mytesi and SB-300. Dr. Chaturvedi has co-founded and led multiple biotech enterprises including Scion, IndUS and Oceanyx, and has served as the CEO or CSO for Scion, IndUS, Napo, Oceanyx and Pivot Pharmaceuticals. Over his 25+ year career, Dr. Chaturvedi has led the discovery and/or the development activities for several new chemical entities (NCEs) including the successful development of crotelemer (Mytesi) and has participated in the discovery and/or development of novel drugs for the treatment of HIV, hepatitis C, epilepsy and Alzheimer's disease. Earlier in his career, Dr. Chaturvedi was the Head of Lead Evaluation at Vertex Pharmaceuticals and was in the preclinical group at Alkermes. He started his career in the Product Development group at Parke-Davis/Warner-Lambert Company (now Pfizer). Dr. Chaturvedi holds a Ph.D. in Pharmaceutical Sciences from West Virginia University and a Bachelor's in Pharmacy from the University of Bombay.

Description of Properties

Napo's corporate headquarters are located in San Francisco, California, where Napo shares office space with Jaguar. Napo believes that Napo's existing facilities are adequate for the near term and believes that suitable additional or alternative space would be available if required in the future on commercially reasonable terms if Jaguar is not able to convert the current sublease to a lease by August 31, 2018 on commercially reasonable terms. See "Jaguar Business Description of Properties".

Legal Proceedings

Napo is subject to legal proceedings, claims and litigation arising in the ordinary course of business, including those described in further detail below. Napo cannot predict the outcome of such matters or estimate the possible loss or range of loss, if any, because of considerable uncertainties that exist. Therefore, it is possible that the outcome of those legal proceedings, claims and litigation could adversely affect Napo's financial condition, results of operations or cash flows when resolved in a future period.

Napo is not currently subject to any legal proceedings or claims. However in the ordinary course of business, Napo may become subject to legal proceedings, claims and litigation. Therefore, Napo cannot predict the outcome of such matters or estimate the possible loss or range of loss, if any, because of considerable uncertainties that exist. Therefore, it is possible that the outcome of those legal proceedings, claims and litigation could adversely affect Napo's financial condition, results of operations or cash flows when resolved in a future period.

Napo/Salix Litigation

In May 2011, Napo sued Salix in the New York County Supreme Court of the State of New York with regard to Salix's performance under the collaboration agreement signed with Salix in December 2008 (sometimes referred to herein as the Salix Collaboration Agreement). The litigation ultimately went to trial in February 2014 and the jury found for the defendant, Salix. Napo filed an appeal of the litigation.

On March 4, 2016, Napo and Salix entered into a Settlement, Termination, Asset Transfer and Transition Agreement (together with any amendments thereto, sometimes referred to herein as the

Table of Contents

Napo/Salix Settlement Agreement). The Napo/Salix Settlement Agreement settled the litigation between the companies and terminated the Salix Collaboration Agreement. In addition, all rights to crofelemer previously licensed to Salix, including with respect to the FDA approved drug, Mytesi®, were transferred to Napo, along with certain regulatory and other documentation. Napo received inventories of Mytesi® drug product, active pharmaceutical ingredient and crude plant latex (CPL) used in the manufacture of Mytesi®, as well as 490 hectares of land in Peru for which it recognized a gain on settlement of \$1,888,319. In addition, certain existing inventory of CPL is expected to be transferred to Napo in 2017. The Napo/Salix Settlement Agreement also provides that Salix (now owned by Valeant Pharmaceuticals International) will receive a portion of the proceeds of any sale of Napo (an acquisition of Napo by Jaguar that meets the conditions as defined in the Napo/Salix Settlement Agreement is excluded) or a portion of any payments made by Napo's licensees, sublicensees or partners of the reverted crofelemer rights or other transferred assets in the former Salix territories, in each case after the deduction of a fixed amount.

Table of Contents

JAGUAR MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview

Jaguar is an animal health company focused on developing and commercializing first-in-class gastrointestinal products for companion and production animals, foals, and high value horses. Canalevia is Jaguar's lead prescription drug product candidate, intended for treatment of various forms of diarrhea in dogs. Jaguar achieved statistically significant results in a multicenter canine proof-of-concept study completed in February 2015, supporting the conclusion that Canalevia treatment is superior to placebo. As Jaguar announced in December 2015, the pivotal clinical field study to evaluate the safety and effectiveness of Canalevia for acute diarrhea in dogs is underway. Two-hundred dogs were enrolled in the Canalevia pivotal study, which completed enrollment in January 2017. Jaguar has received Minor Use in a Minor Species (MUMS) designation for Canalevia for Chemotherapy-Induced Diarrhea (CID) in dogs. Canalevia is a canine-specific formulation of crofelemer, an active pharmaceutical ingredient isolated and purified from the *Croton lechleri* tree, which is sustainably harvested. A human-specific formulation of crofelemer, Mytesi (formerly known as Fulyzaq), was approved by the FDA in 2012 for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy. Members of Jaguar's management team developed crofelemer while at Napo, which was Jaguar's parent company until May 13, 2015. The reception among users of Jaguar's lead non-prescription products Neonorm Calf and Neonorm Foal, an anti-diarrheal product Jaguar launched for newborn horses in early 2016 has been quite positive. The clinically-proven performance of Neonorm Foal, in combination with Jaguar's heightened understanding of market needs within the global equine space, is driving Jaguar's increased focus on equine product development. Equilevia (formerly referred to as SB-300) is Jaguar's prescription drug product candidate for treatment of gastrointestinal ulcers in horses. Equilevia is a pharmaceutical formulation of a standardized botanical extract. Neonorm is a standardized botanical extract derived from the *Croton lechleri* tree. Jaguar launched Neonorm Calf in the United States at the end of 2014 for preweaned dairy calves. Canalevia, Equilevia and Neonorm are distinct products formulated to address specific species and market channels. Jaguar has filed nine investigational new animal drug applications, or INADs, with the FDA and intend to develop species-specific formulations of Neonorm in six additional target species, and Canalevia for both cats and dogs. In July 2016 Jaguar released data from two China-based studies sponsored by Fresno, California-based Integrated Animal Nutrition and Health Inc. showing remarkable resolution of diarrhea and cure of piglets afflicted with diarrhea following treatment with a *Croton lechleri* botanical extract administered in water.

As Jaguar announced in December 2016, it has signed a distribution agreement with Henry Schein, Inc., the world's largest provider of health care products and services to office-based dental, animal health and medical practitioners, for exclusive distribution of Neonorm Foal product to all segments of the U.S. equine market. Henry Schein's animal health business, Dublin, Ohio-based Henry Schein Animal Health, employs approximately 900 team members and had 2015 net sales of \$2.9 billion. The agreement became effective on December 9, 2016, and, subject to provisions specified in the agreement, shall continue in force for an initial period of one year. Thereafter, unless either party notifies the other of its intent not to renew the term of the agreement at least 30 days prior to the end of the then current term, the term shall be automatically renewed upon expiration for successive renewal terms of one year.

As Jaguar announced in September 2016, it has signed an exclusive supply and distribution agreement for this botanical extract with Integrated Animal Nutrition and Health Inc. for dairy cattle and pigs in the Chinese marketplace. According to the Minnesota-based Institute for Agriculture and Trade Policy, swine production was expected to reach 723 million head in 2014 in China, where pork is still the main protein source for many consumers. In 2015 there were an estimated 15.6 million dairy

Table of Contents

cattle in China, according to Index Muni. Integrated Animal Nutrition and Health, Inc. has minimum purchase requirements of the botanical extract to maintain their exclusivity.

Since inception, Jaguar has been primarily focused on designing and conducting studies of Canalevia to treat diarrhea in dogs and of Neonorm to help retain fluid in calves and to function as an anti-diarrheal in foals. Jaguar is also focused on developing a full suite of equine products to support and improve gastrointestinal health in foals and adult horses. Gastrointestinal conditions such as acute diarrhea, ulcers and diarrhea associated with acute colitis can be extremely debilitating for horses, and present a significant economic and emotional burden for veterinarians and owners around the world. A portion of Jaguar's activities has also been focused on other efforts associated with being a recently formed company, including securing necessary intellectual property, recruiting management and key employees, and financing activities.

On February 8, 2017, Jaguar entered a binding agreement of terms for Jaguar's acquisition of Napo, followed by an agreement and plan of merger on March 31, 2017. Jaguar expects to incur significant expenses in connection with the merger. While Jaguar has assumed that a certain level of expenses will be incurred, there are many factors that could affect the total amount or the timing of the merger expenses, and many of the expenses that will be incurred are, by their nature, difficult to estimate. These expenses could result in the combined company taking significant charges against earnings following the completion of the merger. The ultimate amount and timing of such charges are uncertain at the present time. Jaguar incurred approximately \$100,000 in professional and other fees associated with the proposed merger during the year ended December 31, 2016.

On January 27, 2017, Jaguar entered into a licensing, development, co-promotion and commercialization agreement with Elanco to license, develop and commercialize Canalevia, its drug product candidate under investigation for treatment of acute and chemotherapy-induced diarrhea in dogs, and other drug product formulations of crofelemer for treatment of gastrointestinal diseases, conditions and symptoms in cats and other companion animals. The Elanco Agreement grants Elanco exclusive global rights to Canalevia, a product whose active pharmaceutical ingredient is sustainably isolated and purified from the Croton lechleri tree, for use in companion animals. Pursuant to the Elanco Agreement, Elanco will have exclusive rights globally outside the U.S. and co-exclusive rights with Jaguar in the U.S. to direct all marketing, advertising, promotion, launch and sales activities related to the Licensed Products.

Under the terms of the Elanco Agreement, Jaguar received a \$1.5 million upfront payment and will receive additional payments upon achievement of certain development, regulatory and sales milestones in an aggregate amount of up to \$61.0 million payable throughout the term of the Elanco Agreement, as well as product development expense reimbursement, and royalty payments on global sales. The Elanco Agreement specifies that Jaguar will supply the Licensed Products to Elanco, and that the parties will agree to set a minimum sales requirement that Elanco must meet to maintain exclusivity. Elanco will also reimburse Jaguar for Canalevia-related expenses, including reimbursement for Canalevia-related expenses in Q4 2016, certain development and regulatory expenses related to Jaguar's planned target animal safety study and the completion of its field study of Canalevia for acute diarrhea in dogs.

Financial Operations Overview

Jaguar was incorporated in June 2013 in Delaware. Napo formed Jaguar to develop and commercialize animal health products. Prior to Jaguar's incorporation, the only activities of Napo related to animal health were limited to the retention of consultants to evaluate potential strategic alternatives. Jaguar was previously a majority-owned subsidiary of Napo. However, following the closing of Jaguar's initial public offering in May 2015, Jaguar is no longer majority-owned by Napo.

Table of Contents

Jaguar has not generated any material revenue to date and expect to continue to incur significant research and development and other expenses. Jaguar's net loss attributable to common stockholders was \$14.7 million and \$16.6 million for the years ended December 31, 2016 and 2015. As of December 31, 2016, Jaguar had total stockholders' deficit of \$2.5 million and cash and cash equivalents of \$950,979. Jaguar expects to continue to incur losses for the foreseeable future as Jaguar expands its product development activities, seek necessary approvals for its product candidates, conduct species-specific formulation studies for its non-prescription products, establish API manufacturing capabilities and begin commercialization activities. As a result, Jaguar expects to experience increased expenditures for 2017.

Revenue

Jaguar sells its primary commercial product Neonorm to distributors under agreements that may provide distributor price adjustments and rights of return under certain circumstances. Until Jaguar has sufficient sales history and pipeline visibility, Jaguar will defer revenue and costs of distributor sales until products are sold by the distributor to the distributor's customers. Revenue recognition depends on notification either directly from the distributor that product has been sold to the distributor's customer, when Jaguar has access to the data. Jaguar maintains system controls to verify that the reported distributor and third party data is accurate. Deferred revenue on shipments to distributors will reflect the estimated effects of distributor price adjustments, if any, and the estimated amount of gross margin expected to be realized when the distributor sells through product purchased from the Company. Accounts receivable from distributors will be recognized and included in deferred revenue when Jaguar ships product to the distributor. Jaguar relieves inventory and recognizes revenue typically upon shipment by the distributor to its customer. Jaguar recognized \$141,523 and \$258,381 in revenue for the years ended December 31, 2016 and 2015, respectively.

Cost of Revenue

Cost of revenue expenses consist of costs to manufacture, package and distribute Neonorm that distributors have sold through to their customers.

Research and Development Expense

Research and development expenses consist primarily of clinical and contract manufacturing expense, personnel and related benefit expense, stock-based compensation expense, employee travel expense, reforestation expenses. Clinical and contract manufacturing expense consists primarily of costs to conduct stability, safety and efficacy studies, and manufacturing startup expenses at an outsourced API provider in Italy.

Jaguar typically uses its employee and infrastructure resources across multiple development programs. Jaguar tracks outsourced development costs by prescription drug product candidate and non-prescription product but does not allocate personnel or other internal costs related to development to specific programs or development compounds.

The timing and amount of Jaguar's research and development expenses will depend largely upon the outcomes of current and future trials for its prescription drug product candidates as well as the related regulatory requirements, the outcomes of current and future species-specific formulation studies for its non-prescription products, manufacturing costs and any costs associated with the advancement of its line extension programs. Jaguar cannot determine with certainty the duration and completion costs of the current or future development activities.

Table of Contents

The duration, costs and timing of trials, formulation studies and development of Jaguar's prescription drug and non-prescription products will depend on a variety of factors, including:

the scope, rate of progress, and expense of Jaguar's ongoing, as well as any additional clinical trials, formulation studies and other research and development activities;

future clinical trial and formulation study results;

potential changes in government regulations; and

the timing and receipt of any regulatory approvals.

A change in the outcome of any of these variables with respect to the development of a prescription drug product candidate or non-prescription product could mean a significant change in the costs and timing associated with Jaguar's development activities.

Jaguar expects research and development expense to increase significantly as it adds personnel and commences additional clinical studies and other activities to develop its prescription drug product candidates and non-prescription products.

Sales and Marketing Expense

Sales and marketing expenses consist of personnel and related benefit expense, stock-based compensation expense, direct sales and marketing expense, employee travel expense, and management consulting expense. Jaguar currently incurs sales and marketing expenses to promote Neonorm calf and foal sales.

Jaguar expects sales and marketing expense to increase significantly as it develops and commercializes new products and grows its existing Neonorm market. Jaguar will need to add sales and marketing headcount to promote the sales of existing and new products.

General and Administrative Expense

General and administrative expenses consist of personnel and related benefit expense, stock-based compensation expense, employee travel expense, legal and accounting fees, rent and facilities expense, and management consulting expense.

Jaguar expects general and administrative expense to increase in order to enable Jaguar to effectively manage the overall growth of the business. This will include adding headcount, enhancing information systems and potentially expanding corporate facilities.

Interest Expense

Interest expense consists primarily of interest on convertible promissory notes, the standby bridge financing commitment and the loan and security agreement (long-term debt arrangement). It also includes interest expense and the amortization of a beneficial conversion feature related to convertible promissory notes issued in June and December 2014 and in February and March 2015.

Table of Contents**Results of Operations***Comparison of the years ended December 31, 2016 and 2015*

The following table summarizes Jaguar's results of operations with respect to the items set forth in such table for the years ended December 31, 2016 and 2015 together with the change in such items in dollars and as a percentage:

	Years Ended December 31,		Variance	
	2016	2015	(\$)	(%)
Revenue	\$ 141,523	\$ 258,381	\$ (116,858)	(45.2)%
Operating Expenses				
Cost of revenue	51,966	123,457	(71,491)	(57.9)%
Research and development expense	7,206,864	6,475,851	731,013	11.3%
Sales and marketing expense	485,440	765,091	(279,651)	(36.6)%
General and administrative expense	5,983,238	5,339,351	643,887	12.1%
Total operating expenses	13,727,508	12,703,750	1,023,758	8.1%
Loss from operations	(13,585,985)	(12,445,369)	(1,140,616)	9.2%
Interest expense, net	(985,549)	(3,317,287)	2,331,738	(70.3)%
Other expense	(11,046)	(27,277)	16,231	(59.5)%
Change in fair value of warrants	(43,200)	(501,617)	458,417	(91.4)%
Loss on extinguishment of debt	(108,000)		(108,000)	N/A
Net loss and comprehensive loss	\$ (14,733,780)	\$ (16,291,550)	\$ 1,557,770	(9.6)%

Revenue and Cost of Revenue

Revenue and related cost of revenue for the years ended December 31, 2016 and 2015 reflects sell-through of Jaguar's Neonorm Calf and Neonorm Foal products to Jaguar's distributors. Jaguar defers recognizing revenue and cost of revenue until products are sold by the distributor to the distributor's end customers and recognition depends on notification from the distributor that product has been sold to the distributor's end customer. In 2016, Jaguar began selling the botanical extract to a distributor for use exclusively in China. The revenue from these sales, which totaled \$24,000 in the year ended December 31, 2016, is recognized upon shipment to the distributor as no return rights are provided to this distributor. Jaguar experienced a reduction in Neonorm Calf unit sales in the year ended December 31, 2016 compared to 2015 resulting in the decrease in revenue. The decrease in cost of revenue was consistent with the decrease in revenue. Jaguar is increasing its efforts to promote sales growth.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Research and Development Expense

The following table presents the components of research and development expense for the years ended December 31, 2016 and 2015 together with the change in such components in dollars and as a percentage:

	Years Ended December 31,		Variance	Variance %
	2016	2015		
R&D:				
Personnel and related benefits	\$ 2,546,220	\$ 1,891,954	\$ 654,266	34.6%
Materials expense and tree planting	113,394	187,876	(74,482)	(39.6)%
Travel, other expenses	400,846	360,362	40,484	11.2%
Clinical and contract manufacturing	2,254,122	3,093,193	(839,071)	(27.1)%
Stock-based compensation	181,489	472,145	(290,656)	(61.6)%
Other	1,710,793	470,321	1,240,472	263.8%
Total	\$ 7,206,864	\$ 6,475,851	\$ 731,013	11.3%

Jaguar increased research and development expense \$731,000 from \$6.5 million in the year ended December 31, 2015 to \$7.2 million for the same period in 2016. Jaguar added headcount to enable it to make significant progress in the development of certain drug candidates that resulted in the increase of \$654,000 in personnel and related benefit expenses, while carefully controlling spend in clinical trials and contract manufacturing. Clinical trial expenses increased due to Jaguar's dog safety and efficacy study and its horse dose determination study both of which began in fiscal year 2016. These expenses were offset by a reduction of contract manufacturing expenses associated with the setup of manufacturing in Italy, which was completed in March 2016. Stock-based compensation decreased \$291,000 from \$472,000 in the year ended December 31, 2015 to \$181,000 in the same period in 2016 primarily due to the reduction in the fair market value of Jaguar common stock. Other expenses, consisting primarily of consulting and formulation expenses, increased \$1.2 million from \$470,000 in the year ended December 31, 2015 to \$1.7 million in the same period in 2016. Consulting expenses increased \$940,000 from \$135,000 in the year ended December 31, 2015 to \$1.1 million in the same period in 2016 due to a substantial increase in contractor utilization to assist in Jaguar's clinical trials and in chemistry, manufacturing and controls ("CMC") activities. Formulation expenses increased \$250,000 from \$170,000 in the year ended December 31, 2015 to \$420,000 for the same period in 2016 due to an increase in work needed to supply clinical operations with active and placebo product for use in clinical trials. Jaguar plans to increase its research and development expense as it continues developing its drug candidates.

Jaguar also continued its reforestation efforts, although its expense decreased \$74,000 from \$188,000 in the year ended December 31, 2015 to \$113,000 for the same period in 2016. Jaguar values and takes to heart the responsibility to replenish trees consumed in order to extract the raw material to manufacture its primary commercial product and the drug product for use in clinical trials.

Table of Contents**Sales and Marketing Expense**

The following table presents the components of sales and marketing expense for the years ended December 31, 2016 and 2015 together with the change in such components in dollars and as a percentage:

	Years Ended December 31,		Variance	Variance %
	2016	2015		
S&M:				
Personnel and related benefits	\$ 198,100	\$ 347,944	\$ (149,844)	(43.1)%
Stock-based compensation	73,679	54,115	19,564	36.2%
Direct Marketing Fees	116,417	196,910	(80,493)	(40.9)%
Other	97,244	166,122	(68,878)	(41.5)%
Total	\$ 485,440	\$ 765,091	\$ (279,651)	(36.6)%

Sales and marketing expense decreased \$280,000 from \$765,000 in the year ended December 31, 2015 to \$485,000 in the same period in 2016 primarily due to a decrease in average monthly headcount for most of the fiscal year and a decrease in direct marketing expense. Personnel costs decreased \$150,000 from \$348,000 for the year ended December 31, 2015 to \$198,000 for the same period in 2016. Stock based compensation expense increased \$20,000 from \$54,000 in the year ended December 31, 2015 to \$74,000 in the same period in 2016 due primarily to expense associated with options granted to a consultant in 2016. Direct marketing and sales expense decreased \$81,000 from \$197,000 in the year ended December 31, 2015 to \$116,000 for the same period in 2016 due to a reduction in marketing programs to promote Jaguar's Neonorm products. Other expenses, consisted primarily of travel expense, consulting expense and royalty expense. Travel expenses decreased \$42,000 from \$66,000 in the year ended December 31, 2015 to \$25,000 in the same period in 2016 consistent with the reduction in headcount. Consulting expense increased \$7,000 from \$47,000 in the year ended December 31, 2015 to \$54,000 in the same period in 2016. Royalty expenses decreased \$39,000 from \$40,000 in the year ended December 31, 2015 to \$1,000 in the same period in 2016 due to a reduction in the royalty rate upon going public and also due to the decrease in sales of Jaguar's Neonorm products. Jaguar plans to expand sales and marketing spend to promote its Neonorm products.

General and Administrative Expense

The following table presents the components of general and administrative expense for the years ended December 31, 2016 and 2015 together with the change in such components in dollars and as a percentage:

	Years Ended December 31,		Variance	Variance %
	2016	2015		
G&A:				
Personnel and related benefits	\$ 2,104,809	\$ 2,025,339	\$ 79,470	3.9%
Accounting fees	311,693	351,743	(40,050)	(11.4)%
Third-party consulting fees and Napo service fees	374,852	200,758	174,094	86.7%
Legal fees	824,288	611,237	213,051	34.9%
Travel	310,066	442,095	(132,029)	(29.9)%
Stock-based compensation	462,759	465,905	(3,146)	(0.7)%
Rent and lease expense	384,147	280,753	103,394	36.8%
Public company expenses	291,253	234,247	57,006	24.3%
Other	919,371	727,274	192,097	26.4%
Total	\$ 5,983,238	\$ 5,339,351	\$ 643,887	12.1%

Table of Contents

Jaguar's general and administrative expenses increased \$644,000 from \$5.3 million in the year ended December 31, 2015 to \$6.0 million for the same period in 2016. In 2015, Jaguar became a public company and added headcount that has resulted in increases of \$79,000 in personnel expense. Stock-based compensation was flat at \$466,000 in the year ended December 31, 2015 compared to \$463,000 in the same period in 2016 due to expense associated with new grants to existing employees offsetting the reduction in Jaguar's stock price. Its public company expenses increased \$57,000 due primarily to a full year of expense in 2016 versus only seven months of expense in 2015 as it filed its IPO in May 2015. Jaguar controlled its professional services expenses, reducing its audit fees by \$40,000. However, Jaguar's legal fees increased \$213,000 from \$611,000 in the year ended December 31, 2015 compared to \$824,000 in the same period in 2016 due to increased public filings with the SEC, and Jaguar increased consulting expenses by \$174,000 from \$201,000 in the year ended December 31, 2015 to \$375,000 in the same period in 2016 primarily due to placement agent fees related to the 2016 private placement financing in 2016. Rent expense increased \$103,000 due to moving into Jaguar's new San Francisco headquarters facility in July of 2015. Other expenses, including insurance costs also increased as a result of becoming a public company in May 2015. Jaguar expects to incur additional general and administrative expense as a result of operating as a public company and as it grows its business, including expenses related to compliance with the rules and regulations of the SEC, additional insurance expenses, investor relations activities and other administrative and professional services.

Liquidity and Capital Resources

Sources of Liquidity

Jaguar had an accumulated deficit of \$40.4 million as a result of incurring net losses since its inception as Jaguar has not generated significant revenue through the current fiscal year. Jaguar's net loss and comprehensive loss was \$801,000 for the period from inception to December 31, 2013, \$8.6 million for the year ended December 31, 2014, \$16.3 million for the year ended December 31, 2015, and \$14.7 million for the year ended December 31, 2016. Jaguar expects to continue to incur additional losses through the end of fiscal year 2017 and in future years due to expected significant expenses for toxicology, safety and efficacy clinical trials of its products and product candidates, for establishing contract manufacturing capabilities, and for the commercialization of one or more of its product candidates, if approved.

Jaguar had cash and cash equivalents of \$951,000 as of December 31, 2016 compared to \$7.7 million as of December 31, 2015. Jaguar does not believe its existing cash and cash equivalents will be sufficient to meet its anticipated cash requirements for the next 12 months. Jaguar's independent registered public accounting firm has included an explanatory paragraph in its audit report included in Jaguar's financial statements attached hereto regarding their assessment of substantial doubt about Jaguar's ability to continue as a going concern. Jaguar's financial statements do not include any adjustments that may result from the outcome of this uncertainty.

To date, Jaguar has funded its operations primarily through the issuance of equity securities, short-term convertible promissory notes, and long-term debt, in addition to sales of Neonorm, its commercial product:

In 2013, Jaguar received \$400 from the issuance of 2,666,666 shares of common stock to its parent Napo Pharmaceuticals, Inc. Jaguar also received \$519,000 of net cash from the issuance of convertible promissory notes in an aggregate principal amount of \$525,000. These notes were all converted to common stock in 2014.

In 2014, Jaguar received \$6.7 million in proceeds from the issuance of convertible preferred stock. Effective as of the closing of its initial public offering, the 3,015,902 shares of outstanding convertible preferred stock were automatically converted into 2,010,596 shares of common stock. Following its initial public offering, there were no shares of preferred stock outstanding.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

In 2014, Jaguar received \$1.1 million from the issuance of convertible promissory notes in an aggregate principal amount of \$1.1 million. These notes were converted to common stock upon the effectiveness of the initial public offering in May of 2015. In August 2014, Jaguar entered into a standby line of credit with an individual, who is an accredited investor, for up to \$1.0 million. To date, Jaguar had not made any drawdowns under this facility. Also, in October of 2014, as amended and restated in December 2014, Jaguar entered into a \$1.0 million standby bridge loan which was repaid in 2015.

In 2015, Jaguar received \$1.25 million in exchange for \$1.25 million of convertible promissory notes, of which \$1.0 million was converted to common stock in 2015, and \$100,000 was repaid in 2015. The remaining \$150,000 remains outstanding.

In May 2015, Jaguar received net proceeds of \$15.9 million upon the closing of its initial public offering, gross proceeds of \$20.0 million (2,860,000 shares at \$7.00 per share) net of \$1.2 million of underwriting discounts and commissions and \$3.3 million of offering expenses, including \$0.4 million of non-cash expense. These shares began trading on The NASDAQ Capital Market on May 13, 2015.

In 2015, Jaguar received net proceeds of \$5.9 million from the issuance of long-term debt. Jaguar entered into a loan and security agreement with a lender for up to \$8.0 million, which provided for an initial loan commitment of \$6.0 million. Under the loan agreement Jaguar is required to maintain \$4.5 million of the proceeds in cash, which amount may be reduced or eliminated on the achievement of certain milestones. An additional \$2.0 million is available contingent on the achievement of certain further milestones. The agreement has a term of three years, with interest only payments through February 29, 2016. Thereafter, principal and interest payments will be made with an interest rate of 9.9%. Additionally, there will be a balloon interest payment of \$560,000 on August 1, 2018. This amount is being recognized over the term of the loan agreement and the effective interest rate, considering the balloon payment, is 15.0%. Jaguar's proceeds are net of a \$134,433 debt discount under the terms of such agreement.

In 2014 and 2015, Jaguar received \$24,000 and \$531,000, respectively, in cash from sales of Neonorm to distributors.

In 2015, Jaguar received approximately \$13,000 in proceeds from the exercise of stock options.

In 2016, Jaguar received net proceeds of \$4.1 million upon the closing of its follow-on public offering, reflecting gross proceeds of \$5.0 million (2.0 million shares at \$2.50 per share) net of \$373,011 of underwriting discounts and commissions and \$496,887 of offering expenses.

In June 2016, Jaguar entered into the CSPA with a private investor. Under the terms of the agreement, Jaguar may sell up to \$15.0 million in common stock to the investor during the approximately 30-month term of the agreement. Upon execution of the CSPA, Jaguar sold 222,222 shares of its common stock to the investor at \$2.25 per share for net proceeds of \$448,732, reflecting gross proceeds of \$500,000 and offering expenses of \$51,268. In consideration for entering into the CSPA, Jaguar issued 456,667 shares of its common stock to the investor. Jaguar issued 1,348,601 shares in exchange for net proceeds of \$2,122,570, reflecting gross proceeds of \$2,176,700 net of \$54,130 offering expenses under the CSPA in the year ended December 31, 2016.

In October 2016, Jaguar entered into a Common Stock Purchase Agreement with an existing private investor. Upon execution of the agreement Jaguar sold 170,455 shares of its common stock in exchange for \$150,000 in cash proceeds.

On November 22, 2016, Jaguar entered into a Securities Purchase Agreement, or the 2016 Purchase Agreement, with certain institutional investors, pursuant to which Jaguar sold securities

Table of Contents

to such investors in a private placement transaction, which is referred to herein as the 2016 Private Placement. In the 2016 Private Placement, Jaguar sold an aggregate of 1,666,668 shares of its common stock at a price of \$0.60 per share for gross proceeds of approximately \$1.0 million. The investors in the 2016 Private Placement also received (i) warrants to purchase up to an aggregate of 1,666,668 shares of Jaguar common stock, at an exercise price of \$0.75 per share, or the Series A Warrants, (ii) warrants to purchase up to an aggregate 1,666,668 shares of Jaguar common stock, at an exercise price of \$0.90 per share, or the Series B Warrants, and (iii) warrants to purchase up to an aggregate 1,666,668 shares of Jaguar common stock, at an exercise price of \$1.00 per share, or the Series C Warrants and, together with the Series A Warrants and the Series B Warrants, the 2016 Warrants.

On January 27, 2017, Jaguar entered into a licensing, development, co-promotion and commercialization agreement with Elanco to license, develop and commercialize Canalevia, Jaguar's drug product candidate under investigation for treatment of acute and chemotherapy-induced diarrhea in dogs, and other drug product formulations of crofelemer for treatment of gastrointestinal diseases, conditions and symptoms in cats and other companion animals. The Elanco Agreement grants Elanco exclusive global rights to Canalevia, a product whose active pharmaceutical ingredient is sustainably isolated and purified from the Croton lechleri tree, for use in companion animals. Pursuant to the Elanco Agreement, Elanco will have exclusive rights globally outside the U.S. and co-exclusive rights with us in the U.S. to direct all marketing, advertising, promotion, launch and sales activities related to the Licensed Products. Under the terms of the Elanco Agreement, Jaguar received a \$1.5 million upfront payment and will receive additional payments upon achievement of certain development, regulatory and sales milestones in an aggregate amount of up to \$61.0 million payable throughout the term of the Elanco Agreement, as well as product development expense reimbursement, and royalty payments on global sales. The Elanco Agreement specifies that Jaguar will supply the Licensed Products to Elanco, and that the parties will agree to set a minimum sales requirement that Elanco must meet to maintain exclusivity. Elanco will also reimburse Jaguar for Canalevia-related expenses, including reimbursement for Canalevia-related expenses in Q4 2016, certain development and regulatory expenses related to Jaguar's planned target animal safety study and the completion of its field study of Canalevia for acute diarrhea in dogs.

Prior to Jaguar's entry into the merger agreement, Invesco Asset Management Limited (sometimes referred to herein as Invesco), an existing stockholder of both Napo and Jaguar, delivered a signed commitment letter to Jaguar on February 21, 2017, pursuant to which Invesco agreed, subject to the terms and conditions of such agreement, to purchase, simultaneously with the consummation of the merger, \$3.0 million of Jaguar common stock at a price equal to \$0.925 per share. Jaguar will loan Napo the \$3.0 million in proceeds to partially facilitate the extinguishment of the debt that Napo owes to Nantucket.

Jaguar expects its expenditures will continue to increase as it continues its efforts to develop animal health products, expand its commercially available Neonorm product and continue development of Canalevia in the near term. Jaguar has agreed to pay Indena S.p.A. fees of approximately €2.1 million under a memorandum of understanding relating to the establishment of its commercial API manufacturing arrangement in Italy. As of June 30, 2016, Jaguar remitted €1.95 million of the €2.1 million. Jaguar paid the final €150,000 on July 15, 2016.

Jaguar does not believe its current capital is sufficient to fund its operating plan through December 2017. Jaguar will need to seek additional funds sooner than planned, through public or private equity or debt financings or other sources, such as strategic collaborations. Such financing may result in dilution to stockholders, imposition of debt covenants and repayment obligations or other restrictions that may affect its business. In addition, Jaguar may seek additional capital due to favorable market conditions or strategic considerations even if Jaguar believes it has sufficient funds for its

Table of Contents

current or future operating plans. Jaguar may also not be successful in entering into partnerships that include payment of upfront licensing fees for its products and product candidates for markets outside the United States, where appropriate. If Jaguar does not generate upfront fees from any anticipated arrangements, it would have a negative effect on Jaguar's operating plan. Jaguar plans to finance its operations and capital funding needs through equity and/or debt financing as well as revenue from future product sales. However, there can be no assurance that additional funding will be available to Jaguar on acceptable terms on a timely basis, if at all, or that Jaguar will generate sufficient cash from operations to adequately fund operating needs or ultimately achieve profitability. If Jaguar is unable to obtain an adequate level of financing needed for the long-term development and commercialization of its products, it will need to curtail planned activities and reduce costs. Doing so will likely have an adverse effect on Jaguar's ability to execute on its business plan.

Cash Flows for Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015

The following table shows a summary of cash flows for the years ended December 31, 2016 and 2015:

	Years Ended December 31,	
	2016	2015
Total cash used in operations	\$ (14,413,718)	\$ (14,315,863)
Total cash provided by/(used in) investing activities	2,384,500	(3,002,700)
Total Cash Provided by Financing Activities	5,282,666	24,170,902
	\$ (6,746,552)	\$ 6,852,339

Cash Used in Operating Activities

During the year ended December 31, 2016, cash used in operating activities of \$14.4 million resulted from Jaguar's net loss of \$14.7 million, offset by non-cash accretion of end of term payment, debt discounts and debt issuance costs of \$510,000, stock-based compensation of \$718,000, loss on extinguishment of debt of \$108,000, depreciation expense of \$47,000, net of changes in operating assets and liabilities of \$1.1 million.

During the year ended December 31, 2015, cash used in operating activities of \$14.3 million resulted from Jaguar's net loss of \$16.3 million, offset by non-cash accretion of debt discounts of \$2.5 million, non-cash revaluation of warrant liability of \$502,000 and stock-based compensation of \$992,000, amortization of debt issuance costs of \$130,000, accretion of the balloon payment on the long-term debt of \$116,000, loss on the sale of property and equipment of \$35,000, depreciation expense of \$5,000, net of changes in operating assets and liabilities of \$2.3 million.

Cash Provided By/Used In Investing Activities

During the year ended December 31, 2016, cash provided by investing activities of \$2.4 million primarily consisted of \$2.5 million of a release of restricted cash that resulted from a reduction in Jaguar's long-term debt, net of \$104,000 in purchases of property and equipment.

During the year ended December 31, 2015, cash used in investing activities of \$3.0 million primarily consisted of \$3.0 million in restricted cash that resulted from Jaguar's issuance of long-term debt, \$23,000 from the purchase of property and equipment, net of \$21,000 from the sale of property and equipment.

Table of Contents

Cash Provided by Financing Activities

During the year ended December 31, 2016, cash provided by financing activities of \$5.3 million primarily consisted of \$4.1 million in net cash received in Jaguar's secondary public offering, net of commissions and certain offering expenses, \$2.6 million in net proceeds received in the CSPA, \$150,000 in net proceeds from an additional common stock purchase agreement, and \$903,000 in net cash received in the sale of common stock to various investors as part of the 2016 Private Placement offset by \$2.5 million in principal payments on its long-term debt.

During the year ended December 31, 2015, cash provided by financing activities 24.2 million primarily consisted of the gross proceeds from the issuance of \$5.6 million in long-term debt, net of discounts and debt issuance costs, \$1.3 million in convertible promissory notes, offset by \$1.1 million in repayments thereof, and \$18.4 million in net cash was provided related to Jaguar's initial public offering, net of commissions and certain deferred offering costs, offset by the repayment of the \$1.0 million bridge loans and \$100,000 in convertible notes.

Description of Indebtedness

Convertible Notes and Warrants

2013 Convertible Notes

From July through September 2013, Jaguar issued four convertible promissory notes (collectively the "Notes") for gross aggregate proceeds of \$525,000 to various third-party lenders. The Notes bore interest at 8% per annum. The Notes automatically matured and the entire outstanding principal amount, together with accrued interest, was due and payable in cash at the earlier of July 8, 2015 (the "Maturity Date") or ten business days after the date of consummation of the initial closing of a first equity round of financing. Jaguar consummated a first equity round of financing prior to the Maturity Date with a pre-money valuation of greater than \$3.0 million, and, accordingly, principal and accrued interest was converted into shares of common stock at 75% of the purchase price paid by such equity investors. These notes were all converted to common stock in February 2014 upon the issuance of the convertible preferred stock. In February 2014, in connection with the first equity round of financing and issuance of the Series A convertible preferred stock, the noteholders exercised their option to convert their Notes into 207,664 shares of common stock and accrued interest was paid in cash to the noteholders. The accreted interest expense related to the discount on the Notes was \$1,443 for the period from January 1, 2014 to the conversion date of the Notes. Upon conversion, the entire remaining debt discount of \$4,071 was recorded as interest expense.

In connection with the Notes, Jaguar issued warrants to the noteholders, which became exercisable to purchase an aggregate of 207,664 shares of common stock as of the issuance of the first equity round of financing (the "Warrants"). The Warrants have a \$2.53 exercise price, are fully exercisable from the initial date of the first equity round of financing, and have a five-year term subsequent to that date. The warrants were fully expensed prior to 2016.

2014 Convertible Notes

On June 2, 2014, pursuant to a convertible note purchase agreement, Jaguar issued convertible promissory notes in the aggregate principal amount of \$300,000 to two accredited investors, including a convertible promissory note for \$200,000 to a board member to which Series A preferred stock was sold. These notes accrued interest at 3% per annum and automatically were to mature on June 1, 2015. Interest expense for the year ended December 31, 2015 was \$3,237 and is included in interest expense in the statement of operations and comprehensive loss. Accrued interest is \$8,507 and is included in accrued liabilities in the balance sheet. All interest was to be paid in cash upon maturity. Upon the closing of the IPO, the outstanding principal amount automatically converted into 53,571 shares common stock at \$5.60, as amended in March 2015. Upon issuance, Jaguar analyzed the beneficial

Table of Contents

nature of the conversion terms and determined that a beneficial conversion feature, or BCF, existed because the effective conversion price on issuance of the notes was less than the fair value at the time of the issuance. Jaguar calculated the value of the BCF using the intrinsic method and recorded a BCF of \$75,000 as a discount to notes payable and to additional paid-in capital. For the year ended December 31, 2015, Jaguar amortized \$31,250 of the discount as interest expense in the statements of operations and comprehensive loss.

On July 16, 2014, pursuant to a convertible note purchase agreement, Jaguar issued a convertible promissory note in the principal amount of \$150,000 to an accredited investor. This note accrued interest at 3% per annum and automatically was to mature on June 1, 2015. Interest expense for the year ended December 31, 2015 was \$1,627 and is included in interest expense in the statements of operations and comprehensive loss. Accrued interest is \$3,711 and is included in accrued liabilities in the balance sheet. All interest was to be paid in cash upon maturity. Upon the closing of the Jaguar's IPO, the outstanding principal amount automatically converted into 26,785 shares of common stock at \$5.60, as amended in March 2015. Upon issuance, Jaguar analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. Jaguar calculated the value of the BCF using the intrinsic method and recorded a BCF of \$37,500 as a discount to the notes payable and to additional paid-in capital. For the year ended December 31, 2015, Jaguar amortized \$17,857 of the discount as interest expense in the statements of operations and comprehensive loss.

In connection with the Transfer Agreement (Note 6) Jaguar issued fully vested and immediately exercisable warrants to the Manufacturer to purchase 16,666 shares of common stock at 90% of the IPO price, amended to \$6.30 in March 2015, for a period of five years. The fair value of the warrants, \$37,840, was recorded as research and development expense and additional paid-in capital in June 2014. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$4.83, exercise price of \$4.35, term of five years, volatility of 49%, dividend yield of 0%, and risk-free interest rate of 1.64%.

On December 23, 2014, pursuant to a convertible note purchase agreement, Jaguar issued convertible promissory notes in the aggregate principal amount of \$650,000 to three accredited investors, including a convertible promissory note for \$250,000 to the same board member to which the June 2, 2014 \$200,000 convertible promissory note was issued and to which Series A preferred stock was sold. These notes accrued interest at 12% per annum and became payable within thirty days following the IPO. Interest expense for the year ended December 31, 2015 was \$28,210 and is included in interest expense in the statements of operations and comprehensive loss. Accrued interest is \$30,132 and is included in accrued liabilities in the balance sheet. All interest was to be paid in cash upon maturity. Upon consummation of Jaguar's IPO, the noteholders converted the notes into 116,070 shares of common stock at a conversion price equal to 80% of the IPO price, amended to \$5.60 in March 2015. In connection with these notes, Jaguar also issued the lenders a fully vested warrant to purchase shares of Jaguar common stock at an exercise price equal to 80% of the IPO price, amended to \$5.60 in March 2015. These warrants entitle the noteholders to purchase 58,035 shares of common stock. The fair value of the warrants, \$147,943, was recorded as a debt discount and liability at December 23, 2014. Jaguar amortized \$141,890 of this discount in the year ended December 31, 2015 which has been recorded as interest expense in the statements of operations and comprehensive loss. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$4.59, exercise price of \$4.15, term of three years expiring December 2017, volatility of 49%, dividend yield of 0%, and risk-free interest rate of 1.10%. Based on the circumstances, the value derived using the Black-Scholes model approximated that which would be obtained using a lattice model. The debt discount was amortized as interest expense over the one hundred ninety days from issuance of the notes through their first maturity date of July 31, 2015, beginning in January 2015. Jaguar analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. Jaguar calculated the value of

Table of Contents

the BCF using the intrinsic method. A BCF of \$502,057 was recorded as a discount to the notes payable and to additional paid-in capital. For the years ended December 31, 2016 and 2015, Jaguar amortized \$0 and \$484,329 of the BCF as interest expense in the statements of operations and comprehensive loss.

2015 Convertible Notes

In February 2015, Jaguar issued convertible promissory notes to two accredited investors in the aggregate principal amount of \$250,000. These notes were issued pursuant to the convertible note purchase agreement dated December 23, 2014. In connection with the issuance of the notes, Jaguar issued the lenders warrants to purchase 22,320 shares at \$5.60 per share, which expire December 31, 2017. Principal and interest of \$103,912 was paid in May 2015 for \$100,000 of these notes. Jaguar analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. Jaguar calculated the value of the BCF using the intrinsic method. A BCF for the full face value was recorded as a discount to the notes payable and to additional paid-in capital. For the years ended December 31, 2016 and 2015, Jaguar amortized \$0 and \$250,000 of the BCF as interest expense in its statement of operations and comprehensive income.

Extinguishment of debt

The remaining outstanding note of \$150,000 is payable to the investor at an effective simple interest rate of 12% per annum, and was due in full on July 31, 2016. On July 28, 2016, Jaguar entered into an amendment to extend the repayment of the principal and related interest under the terms of the remaining note from July 31, 2016 to October 31, 2016. On November 8, 2016, Jaguar entered into an amendment to further extend the maturity date of the remaining note from October 31, 2016 to January 1, 2017. In exchange for the extension of the maturity date, on November 8, 2016, Jaguar's board of directors granted the lender a warrant to purchase 120,000 shares of Jaguar common stock for \$0.01 per share. The warrant is exercisable at any time on or before July 28, 2022, the expiration date of the warrant.

The amendment and related warrant issuance resulted in Jaguar's treating the debt as having been extinguished and replaced with new debt for accounting purposes. Jaguar calculated a loss on the extinguishment of debt of \$108,000 which is included in other expense in the statements of operations and comprehensive loss.

The \$150,000 note is included in notes payable in the balance sheet. Jaguar accrued interest of \$33,929, which is included in accrued liabilities in the balance sheet, and incurred \$18,049 and \$15,880 in interest expense in the years ended December 31, 2016 and 2015, respectively.

On December 28, 2016, Jaguar entered into an amendment to further extend the maturity date of the note from January 1, 2017 to January 31, 2017. On January 31, 2017, Jaguar entered into an amendment to further extend the due date of the \$150,000 convertible note payable from January 31, 2017 to January 1, 2018.

In March 2015, Jaguar entered into a non-binding letter of intent with an investor. In connection therewith, the investor paid Jaguar \$1.0 million. At March 31, 2015, Jaguar had recorded this amount as a loan advance on the balance sheet. In April 2015, the investor purchased \$1.0 million of convertible promissory notes from Jaguar, the terms of which provided that such notes were to be converted into shares of Jaguar common stock upon the closing of an IPO at a conversion price of \$5.60 per share. In connection with the purchase of the notes, Jaguar issued the investor a warrant to purchase 89,285 shares at \$5.60 per share, which expires December 31, 2017. The notes accrued simple interest of 12% per annum and, upon consummation of Jaguar's IPO in May 2015, converted into 178,571 shares of Jaguar common stock. Jaguar analyzed the beneficial nature of the conversion terms

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. Jaguar calculated the value of the BCF using the intrinsic method. A BCF of for the full face value was recorded as a discount to the notes payable and to additional paid-in capital. For the year ended December 31, 2015, Jaguar amortized \$1,000,000 of the BCF as interest expense in the statements of operations and comprehensive income. Jaguar accrued interest of \$17,753, which is included in accrued liabilities in the balance sheet, and has incurred \$17,753 and \$15,880 in interest expense in the years ended December 31, 2016 and 2015, respectively.

As of December 31, 2016 and 2015, the convertible notes payable obligations were as follows:

	December 31, 2016	December 31, 2015
Notes payable	\$ 150,000	\$ 150,000
Unamortized note discount		
Net debt obligation	\$ 150,000	\$ 150,000

Interest expense on the convertible notes for the years ended December 31, 2016 and 2015 was as follows:

	Years Ended December 31,	
	2016	2015
Nominal Interest	\$ 18,049	\$ 70,619
Amortization of debt discount		1,925,326
	\$ 18,049	\$ 1,995,945

Interest payable on the convertible notes at December 31, 2016 and 2015 was as follows:

	December 31, 2016	December 31, 2015
Interest Payable:	\$ 94,048	\$ 75,999

Notes Payable Bridge Loans

On October 30, 2014, Jaguar entered into a standby bridge financing agreement with two lenders, which was amended and restated on December 3, 2014, which provided a loan commitment in the aggregate principal amount of \$1.0 million (the "Bridge"). Proceeds to Jaguar were net of a \$100,000 debt discount under the terms of the Bridge and net of \$104,000 of debt issuance costs. This debt discount and debt issuance costs were recorded as interest expense using the effective interest method, over the six month term of the Bridge. The Bridge became payable upon the IPO. The Bridge was repaid in May 2015, including interest thereon in an amount of \$1,321,600. In connection with the Bridge, the lenders were granted warrants to purchase 178,569 shares of Jaguar common stock determined by dividing \$1.0 million by the exercise price of 80% of the IPO price, amended to \$5.60 in March 2015. The fair value of the warrants, \$505,348, was originally recorded as a debt discount and liability at December 3, 2014. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$5.01, exercise price of \$5.23, term of five years expiring December 2019, volatility of 63%, dividend yield of 0%, and risk-free interest rate of 1.61%. Based on the circumstances, the value derived using the Black-Scholes model approximated that which would be obtained using a lattice model. The debt discount was recorded as interest expense over the six month term of the Bridge. Of the aggregate debt discount of \$605,348 (warrants and original \$100,000 discount), \$521,291 was recorded as interest expense during the year ended December 31, 2015. Additional financing costs of \$104,000 were incurred related to the Bridge and deferred on closing.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

These were recognized as interest expense over the six-month term of the Bridge using the effective interest method. Jaguar amortized the remaining \$86,667 of these deferred financing charges by the end of May 2015 was recorded the amortized amounts as interest expense. Jaguar fully extinguished the debt and accrued interest in May 2015.

Interest expense on the notes payable-bridge loans for the years ended December 31, 2016 and 2015 was as follows:

	Years Ended December 31,	
	2016	2015
Nominal Interest	\$	\$ 100,000
Amortization of debt discount		521,291
Repayment premium		201,600
Debt issuance costs		86,667
	\$	\$ 909,558

Standby Line of Credit

In August 2014, Jaguar entered into a standby line of credit with an accredited investor for up to \$1.0 million pursuant to a Line of Credit and Loan Agreement dated August 26, 2014. In connection with the entry into the standby line of credit, Jaguar issued the lender a fully vested warrant to purchase 33,333 shares of common stock at an exercise price equal to 80% of the IPO price, amended to \$5.60 in March 2015, which expires in August 2016. The fair value of the warrants, \$114,300, was recorded as interest expense and additional paid-in capital in August 2014. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$8.00, exercise price of \$6.40, term of two years, volatility of 52%, dividend yield of 0%, and risk-free interest rate of 0.52%. The line of credit expired on March 31, 2015 and there were no drawdowns under the facility.

Long-term Debt

In August 2015, Jaguar entered into a loan and security agreement with a lender for up to \$8.0 million, which provided for an initial loan commitment of \$6.0 million. The loan agreement requires us to maintain \$4.5 million of the proceeds in cash, which may be reduced or eliminated on the achievement of certain milestones. An additional \$2.0 million is available contingent on the achievement of certain further milestones. The agreement has a term of three years, with interest only payments through February 29, 2016. Thereafter, principal and interest payments will be made with an interest rate of 9.9%. Additionally, there will be a balloon payment of \$560,000 on August 1, 2018. This amount is being recognized over the term of the loan agreement and the effective interest rate, considering the balloon payment, is 15.0%. Proceeds to Jaguar were net of a \$134,433 debt discount under the terms of the loan agreement. This debt discount is being recorded as interest expense, using the interest method, over the term of the loan agreement. Under the agreement, Jaguar is entitled to prepay principal and accrued interest upon five days prior notice to the lender. In the event of prepayment, Jaguar is obligated to pay a prepayment charge. If such prepayment is made during any of the first twelve months of the loan agreement, the prepayment charge will be (a) during such time as Jaguar is required to maintain a minimum cash balance, 2% of the minimum cash balance amount plus 3% of the difference between the amount being prepaid and the minimum cash balance, and (b) after such time as Jaguar is no longer required to maintain a minimum cash balance, 3% of the amount being prepaid. If such prepayment is made during any time after the first twelve months of the loan agreement, 1% of the amount being prepaid.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

On April 21, 2016, the loan and security was amended upon which Jaguar repaid \$1.5 million of the debt out of restricted cash. The amendment modified the repayment amortization schedule providing a four-month period of interest only payments for the period from May through August 2016.

As of December 31, 2016 and 2015, the net long-term debt obligation was as follows:

	December 31, 2016	December 31, 2015
Debt and unpaid accrued end-of-term payment	\$ 3,894,320	\$ 6,115,797
Unamortized note discount	(42,493)	(106,635)
Unamortized debt issuance costs	(114,626)	(206,235)
Net debt obligation	\$ 3,737,201	\$ 5,802,927
Current portion of long-term debt	\$ 1,919,675	\$ 1,707,899
Long-term debt, net of discount	1,817,526	\$ 4,095,028
Total	\$ 3,737,201	\$ 5,802,927

Future principal payments under the long-term debt are as follows:

Years ending December 31	Amount
2017	\$ 2,032,048
2018	1,479,246
Total future principal payments	3,511,294
2018 end-of-term payment	560,000
	4,071,294
Less: unaccreted end-of-term payment at December 31, 2016	(176,974)
Debt and unpaid accrued end-of-term payment	\$ 3,894,320

The obligation at December 31, 2015 includes an end-of-term payment of \$560,000, which accretes over the life of the loan as interest expense. As a result of the debt discount and the end-of-term payment, the effective interest rate for the loan differs from the contractual rate.

Interest expense on the long-term debt for the years ended December 31, 2016 and 2015 was as follows:

	December 31, 2016	December 31, 2015
Nominal Interest	\$ 457,448	\$ 224,400
Amortization of debt discount	64,142	27,798
Accretion of end-of-term payment	267,230	115,797
Debt issuance costs	178,713	43,789
	\$ 967,533	\$ 411,784

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

At the IPO, Jaguar's outstanding warrants to purchase convertible preferred stock were all converted to warrants to purchase common stock.

Warrants

On November 22, 2016, Jaguar entered into a Securities Purchase Agreement, or the 2016 Purchase Agreement, with certain institutional investors, pursuant to which Jaguar sold securities to such investors in a private placement transaction, which Jaguar refers to herein as the 2016 Private

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Placement. In the 2016 Private Placement, Jaguar sold an aggregate of 1,666,668 shares of Jaguar common stock at a price of \$0.60 per share for net proceeds of \$677,224 or gross proceeds of approximately \$1.0 million less \$322,777 in issuance costs. The investors in the 2016 Private Placement also received (i) warrants to purchase up to an aggregate of 1,666,668 shares of Jaguar common stock, at an exercise price of \$0.75 per share, or the Series A Warrants, (ii) warrants to purchase up to an aggregate 1,666,668 shares of Jaguar common stock, at an exercise price of \$0.90 per share, or the Series B Warrants, and (iii) warrants to purchase up to an aggregate 1,666,668 shares of Jaguar common stock, at an exercise price of \$1.00 per share, or the Series C Warrants and, together with the Series A Warrants and the Series B Warrants, the 2016 Warrants. The issuance costs were allocated to common stock, Series A Warrants, and Series B and C Warrants based on the relative fair value of each:

Instruments	Fair Value	% Allocation	Issuance Costs (allocated)
Common Stock	\$ 156,522	16%	\$ 50,522
Warrants (Series A)	700,001	70%	225,944
Warrants (Series B and C)	143,478	14%	46,311
Total	\$ 1,000,001	100%	\$ 322,777

Common stock of a net \$106,000 (fair value less issuance costs) was included in equity in Jaguar's balance sheet. Series A Warrants of \$756,001, consisting of the Series A warrants of \$700,001 and the Series A placement agent warrants of \$56,000, are included in current liabilities in the balance sheet and the \$225,944 of issuance cost was expensed and is in general and administrative expense on the statement of operations and comprehensive loss. Series B and C warrants of a net \$97,167 (fair value less issuance costs) are included in equity in Jaguar's balance sheet.

Jaguar's warrant share activity is summarized as follows:

	December 31, 2016	December 31, 2015
Beginning balance at January 1	748,872	494,267
Warrants granted	5,253,337	254,605
Warrants cancelled	(33,333)	
Ending balance at December 31	5,968,876	748,872

Off-Balance Sheet Arrangements

Since inception, Jaguar has not engaged in the use of any off-balance sheet arrangements, such as structured finance entities, special purpose entities or variable interest entities.

Critical Accounting Policies and Significant Judgments and Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles, or U.S. GAAP, requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosures in the financial statements. Critical accounting policies are those accounting policies that may be material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and that have a material impact on financial condition or operating performance. While Jaguar bases its estimates and judgments on its experience and on various other factors that it believes to be reasonable under the circumstances, actual results may differ from these estimates under different assumptions or conditions. Jaguar believes the following critical accounting policies used in the preparation of its financial statements require significant judgments and

Table of Contents

estimates. For additional information relating to these and other accounting policies, see Note 2 to Jaguar's audited financial statements, appearing elsewhere in this joint proxy statement/prospectus.

Accrued Research and Development Expenses

As part of the process of preparing Jaguar's financial statements, Jaguar is required to estimate accrued research and development expenses. Estimated accrued expenses include fees paid to vendors and clinical sites in connection with Jaguar's clinical trials and studies. Jaguar reviews new and open contracts and communicates with applicable internal and vendor personnel to identify services that have been performed on its behalf and estimates the level of service performed and the associated costs incurred for the service when Jaguar has not yet been invoiced or otherwise notified of the actual cost for accrued expenses. The majority of Jaguar's service providers invoice Jaguar monthly in arrears for services performed or as milestones are achieved in relation to its contract manufacturers. Jaguar makes estimates of its accrued expenses as of each reporting date.

Jaguar bases its accrued expenses related to clinical trials and studies on its estimates of the services received and efforts expended pursuant to contracts with vendors, Jaguar's internal resources, and payments to clinical sites based on enrollment projections. The financial terms of the vendor agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors such as the successful enrollment of animals and the completion of development milestones. Jaguar estimates the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from Jaguar's estimate, Jaguar adjusts the related expense accrual accordingly on a prospective basis. If Jaguar does not identify costs that have been incurred or if it underestimates or overestimates the level of services performed or the costs of these services, its actual expenses could differ from its estimates. To date, Jaguar has not made any material adjustments to its estimates of accrued research and development expenses or the level of services performed in any reporting period presented.

Jaguar expenses the total cost of a certain long-term manufacturing development contract ratably over the estimated life of the contract, or the total amount paid if greater.

Accounting for Stock-Based Compensation

Beginning in the second quarter of 2014, Jaguar awarded options and restricted stock units. Jaguar measures stock-based awards granted to employees and directors at fair value on the date of grant and recognizes the corresponding compensation expense of the awards, net of estimated forfeitures, over the requisite service periods, which correspond to the vesting periods of the awards. Jaguar revalues non-employee options each reporting period using the fair market value of Jaguar's common stock as of the last day of each reporting period.

Key Assumptions. Jaguar's Black-Scholes-Merton option-pricing model requires the input of highly subjective assumptions, including the fair value of the underlying common stock, the expected volatility of the price of Jaguar common stock, the expected term of the option, risk-free interest rates and the expected dividend yield of Jaguar common stock. These estimates involve inherent uncertainties and the application of management's judgment. If factors change and different assumptions are used, Jaguar's stock-based compensation expense could be materially different in the future. These assumptions are estimated as follows:

Fair value of Jaguar common stock Jaguar common stock is valued by reference to the publicly-traded price of Jaguar common stock.

Expected volatility As Jaguar does not have any trading history for Jaguar common stock, the expected stock price volatility for Jaguar common stock was estimated by taking the average

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

historic price volatility for industry peers based on daily price observations for common stock values over a period equivalent to the expected term of Jaguar's stock option grants. Jaguar did not rely on implied volatilities of traded options in its industry peers' common stock because the volume of activity was relatively low. Jaguar intends to continue to consistently apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of Jaguar's own common stock share price becomes available.

Expected term The expected term represents the period that Jaguar's stock-based awards are expected to be outstanding. It is based on the "simplified method" for developing the estimate of the expected life of a "plain vanilla" stock option. Under this approach, the expected term is presumed to be the midpoint between the average vesting date and the end of the contractual term for each vesting tranche. Jaguar intends to continue to apply this process until a sufficient amount of historical exercise activity is available to be able to reliably estimate the expected term.

Risk-free interest rate The risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term of the options for each option group.

Dividend yield Jaguar has never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, Jaguar used an expected dividend yield of zero.

Forfeitures Jaguar estimates forfeitures at the time of grant and revises those estimates periodically in subsequent periods. Jaguar uses historical data to estimate pre-vesting option forfeitures and records stock-based compensation expense only for those awards that are expected to vest.

Common Stock Valuations. Prior to Jaguar's IPO, the fair value of the common stock underlying Jaguar's stock options was determined by its board of directors, which intended all options granted to be exercisable at a price per share not less than the per share fair value of Jaguar common stock underlying those options on the date of grant. The valuations of Jaguar common stock were determined in accordance with the guidelines outlined in the American Institute of Certified Public Accountants Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation. The assumptions Jaguar used in the valuation model are highly complex and subjective. Jaguar bases its assumptions on future expectations combined with management judgment. In the absence of a public trading market, Jaguar board of directors, with input from management, exercised significant judgment and considered numerous objective and subjective factors to determine the fair value of Jaguar common stock as of the date of each option grant and stock award. These judgments and factors will not be necessary to determine the fair value of new awards once the underlying shares begin trading. For now Jaguar included the following factors:

the prices, rights, preferences and privileges of Jaguar Series A preferred stock relative to those of Jaguar common stock;

lack of marketability of Jaguar common stock;

Jaguar's actual operating and financial performance;

current business conditions and projections;

hiring of key personnel and the experience of Jaguar's management;

Jaguar's stage of development;

illiquidity of share-based awards involving securities in a private company;

the U.S. capital market conditions; and

Table of Contents

the likelihood of achieving a liquidity event, such as an offering or a merger or acquisition of Jaguar given prevailing market conditions.

The fair market value per share of Jaguar common stock for purposes of determining stock-based compensation is now the closing price of Jaguar common stock as reported on The NASDAQ Stock Market on the applicable grant date.

Classification of Securities

Jaguar applies the principles of ASC 480-10 "Distinguishing Liabilities From Equity" and ASC 815-40 "Derivatives and Hedging Contracts in Entity's Own Equity" to determine whether financial instruments such as warrants, contingently issuable shares and shares subject to repurchase should be classified as liabilities or equity and whether beneficial conversion features exist. Financial instruments such as warrants that are evaluated to be classified as liabilities are fair valued upon issuance and are remeasured at fair value at subsequent reporting periods with the resulting change in fair value recorded in other income/(expense). The fair value of warrants is estimated using the Black Scholes Merton model and requires the input of subjective assumptions including expected stock price volatility and expected life.

Income Taxes

As of December 31, 2016, Jaguar had net operating loss carryforwards for federal and state income tax purposes of \$24.5 million and \$17.1 million, respectively, which will begin to expire in 2033, subject to limitations. Jaguar's management has evaluated the factors bearing upon the realizability of its deferred tax assets, which are comprised principally of net operating loss carryforwards. Jaguar's management concluded that, due to the uncertainty of realizing any tax benefits as of December 31, 2016, a valuation allowance was necessary to fully offset its deferred tax assets. Jaguar has evaluated its uncertain tax positions and determined that it has no liabilities from unrecognized tax benefits and therefore it has not incurred any penalties or interest. The Tax Reform Act of 1986, as amended, limits the use of net operating loss and tax credit carryforward in certain situations where changes occur in the stock ownership of a company. Utilization of the domestic NOL and tax credit forwards may be subject to a substantial annual limitation due to ownership change limitations that may have occurred or that could occur in the future, as required by the Internal Revenue Code Section 382, as well as similar state provisions.

Recent Accounting Pronouncements

In November 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2016-18, Statement of Cash Flows: Restricted Cash, or ASU 2016-18, that will require entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, entities will no longer present transfers between cash and cash equivalents and restricted cash and restricted cash equivalents in the statement of cash flows. When cash, cash equivalents, restricted cash and restricted cash equivalents are presented in more than one line item on the balance sheet, the new guidance requires a reconciliation of the totals in the statement of cash flows to the related captions in the balance sheet. This reconciliation can be presented either on the face of the statement of cash flows or in the notes to the financial statements. Entities will also have to disclose the nature of their restricted cash and restricted cash equivalent balances. ASU 2016-18 becomes effective for fiscal years beginning after December 15, 2017, and interim periods within those years, with early adoption permitted. Any adjustments must be reflected as of the beginning of the fiscal year that includes that interim period. The adoption of this standard is not expected to have an impact on Jaguar's financial position or results of operations.

Table of Contents

In August 2016, the FASB issued Accounting Standards Update, or ASU, No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments, which addresses the following cash flow issues: (1) debt prepayment or debt extinguishment costs; (2) settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; (3) contingent consideration payments made after a business combination; (4) proceeds from the settlement of insurance claims; (5) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies; (6) distributions received from equity method investees; (7) beneficial interests in securitization transactions; and (8) separately identifiable cash flows and application of the predominance principle. The amendments in this ASU are effective for public business entities for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years and are effective for all other entities for fiscal years beginning after December 15, 2018 and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted, including adoption in an interim period. Jaguar is currently evaluating the impact of the adoption of ASU No. 2016-15 on its consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, which simplifies several aspects of the accounting for employee stock-based payment transactions. The areas for simplification in ASU No. 2016-09 include the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The amendments in this ASU will be effective for annual periods beginning after December 15, 2016 and interim periods within those annual periods. Early adoption is permitted. Jaguar is currently evaluating the impact of the adoption of ASU No. 2016-09 on its consolidated financial statements.

In March 2016 the FASB issued ASU No. 2016-07, Investments - Equity Method and Joint Ventures (Topic 323): Simplifying the Transition to the Equity Method of Accounting. This new standard eliminates the requirement that when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of influence, an adjustment must be made to the investment, results of operations and retained earnings retroactively on a step-by-step basis as if the equity method had been in effect during all previous periods that the investment has been held. T ASU 2016-07 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. Jaguar is currently evaluating the potential effects of the adoption of this update on its financial statements.

In February 2016, the FASB issued Accounting Standards Update ("ASU") No. 2016-02, Leases (Topic 842), which provides guidance for accounting for leases. Under ASU 2016-02, Jaguar will be required to recognize the assets and liabilities for the rights and obligations created by leased assets. ASU 2016-02 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. Jaguar is currently evaluating the impact of the adoption of ASU 2016-02 on its consolidated financial statements.

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers." The objective of ASU 2014-19 is to establish a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and will supersede most of the existing revenue recognition guidance, including industry-specific guidance. The core principle of the new standard is that revenue should be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard is effective for annual reporting periods beginning after December 15, 2018 and allows for prospective or retrospective application. Jaguar currently anticipates utilizing the full retrospective method of adoption allowed by the standard, in order to provide for comparative results in all periods presented, and plan to adopt the standard as of January 1, 2018.

Table of Contents

Jaguar is currently evaluating the new guidance, however Jaguar does not believe the impact will be significant.

JOBS Act

In April 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. Jaguar has irrevocably elected not to avail ourselves of this extended transition period, and, as a result, Jaguar will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

Market Prices of and Dividends on Jaguar Common Stock

Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The following table sets forth information with respect to the beneficial ownership of Jaguar's voting securities as of April 1, 2017, the date of the table, by:

each person known by Jaguar to beneficially own more than 5% of the outstanding shares of its common stock;

each of Jaguar's named executive officers;

each of Jaguar's directors; and

all of Jaguar's directors and executive officers as a group.

Information with respect to beneficial ownership has been furnished by each director, executive officer or beneficial owner of more than 5% of Jaguar's common stock. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting and investment power with respect to the securities. Except as otherwise provided by footnote, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of Jaguar common stock shown as beneficially owned by them. The number of shares of Jaguar common stock used to calculate the percentage ownership of each listed person includes the shares of Jaguar common stock underlying options or warrants held by such persons that are currently exercisable or exercisable within 60 days of April 1, 2017, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

Percentage of beneficial ownership is based on 14,424,128 shares of Jaguar common stock outstanding as of April 1, 2017.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Except as otherwise set forth below, the address of each beneficial owner listed in the table below is c/o Jaguar Animal Health, Inc., 201 Mission Street, Suite 2375, San Francisco, California 94105.

Name and Address of Beneficial Owner	Title of Class	Amount and Nature of Beneficial Ownership	Percent of Class
5% Stockholders:			
Napo Pharmaceuticals, Inc.(1)	Common	2,666,666	18.5%
Entities affiliated with BVCF(2)	Common	1,569,841	10.8%
Invesco Ltd.(3)	Common	1,974,360	13.7%
Entities affiliated with Kingdon Capital Management L.L.C.(4)	Common	1,297,815	9.0%
Named executive officers and directors:			
James J. Bochnowski(5)	Common	678,707	4.7%
Lisa A. Conte(6)	Common	393,058	2.7%
Jiahao Qiu(7)	Common	7,405	*
Zhi Yang, Ph.D.(8)	Common	1,569,841	10.8%
Folkert W. Kamphuis(9)	Common	91,829	*
Steven R. King, Ph.D.(10)	Common	145,353	1.0%
John Micek III(11)	Common	39,164	*
Ari Azhir, Ph.D.(12)	Common	13,618	*
Karen S. Wright(13)	Common	35,475	*
Roger Waltzman(14)	Common	32,113	*
All current executive officers and directors as a group (10 persons)(15)	Common	3,012,715	19.5%

*

Less than 1%.

(1)

Lisa A. Conte, Jaguar's Chief Executive Officer, is the interim chief executive officer of Napo. Napo's four-person board of directors, consisting of Lisa A. Conte, Richard W. Fields, Joshua Mailman and Gregory Stock, has ownership and control of the shares of common stock held by Napo. Certain members of Jaguar's board of directors, as well as certain of Jaguar's executive officers and employees beneficially own common stock in Napo. As a group, Jaguar executive officers and directors (10 persons total), collectively beneficially own 9.8% of the issued and outstanding common stock of Napo, including the Bochnowski Family Trust, which holds 6.5%. Mr. Bochnowski, a member of Jaguar's board of directors, is a co-trustee and beneficiary of such trust and shares voting and investment control over such shares with his spouse. See "Certain Relationships and Related Transactions of Jaguar Napo Arrangements Napo Beneficial Ownership."

(2)

Includes (i) 1,483,326 shares of common stock directly held by Kunlun Pharmaceuticals, Ltd., and (ii) 39,555 shares of common stock, stock options to purchase 10,000 shares of common stock held by Dr. Yang, and warrants to purchase 39,555 shares of common stock held by Sichuan Biopharma. Kunlun Pharmaceuticals, Ltd. is wholly-owned by BVCF III, L.P. and BVCF III-A, L.P., Cayman Islands limited partnerships. BVCF III, L.P. and BVCF III-A, L.P. are managed by BioVeda Management, Ltd., a Cayman Islands company, or BVCF, and Sichuan Biopharma is an investment vehicle of BVCF. Dr. Yang is the sole shareholder of BVCF. BVCF may be deemed to beneficially own all shares held by Kunlun Pharmaceuticals, Ltd. and Sichuan Biopharma. BVCF's principal business address is Suite 2606, Tower 1, New Richport Center, 763 Mengzi Road, Huangpu District, Shanghai 200023, China.

(3)

Represents 1,974,360 shares of common stock owned by Invesco Ltd.

Table of Contents

- (4) Represents 1,297,815 shares of common stock owned by Kingdon Capital Management, L.L.C.
- (5) Includes (i) 487,576 shares of common stock, (ii) 76,074 shares of common stock issuable under stock options that are exercisable or will become exercisable within 60 days of April 1, 2017 and (iii) 121,209 shares of common stock issuable under warrants that are exercisable or will become exercisable within 60 days of April 1, 2017. All securities other than stock options are held by the Bochnowski Family Trust. Mr. Bochnowski is a co-trustee and beneficiary of such trust and shares voting and investment control over such shares with his spouse.
- (6) Represents 5,412 shares of common stock, and 387,646 shares of stock issuable under stock options that are exercisable or will become exercisable within 60 days of April 1, 2017.
- (7) Represents 7,405 shares of stock issuable under stock options that are exercisable or will become exercisable within 60 days of April 1, 2017.
- (8) Represents 1,569,841 shares of common stock beneficially held by BVCF. Dr. Yang is the Chairperson, Founder, Managing Partner and sole shareholder of BVCF and he may be deemed to beneficially own all the shares held by BVCF.
- (9) Represents 91,829 shares of stock issuable under stock options that are exercisable or will become exercisable within 60 days of April 1, 2017.
- (10) Represents 3,157 shares of common stock, and 142,196 shares of stock issuable under stock options that are exercisable or will become exercisable within 60 days of April 1, 2017.
- (11) Represents 39,164 shares of stock issuable under stock options that are exercisable or will become exercisable within 60 days of April 1, 2017.
- (12) Represents 13,618 shares of stock issuable under stock options that are exercisable or will become exercisable within 60 days of April 1, 2017.
- (13) Represents 35,475 shares of stock issuable under stock options that are exercisable or will become exercisable within 60 days of April 1, 2017.
- (14) Represents 32,113 shares of stock issuable under stock options that are exercisable or will become exercisable within 60 days of April 1, 2017.
- (15) See footnotes (5) - (14).

Table of Contents

NAPO MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview

Napo focuses on the development and commercialization of proprietary pharmaceuticals for the global marketplace. Napo's lead product is Mytesi® (sometimes referred to herein as crofelemer), a FDA-approved antidiarrheal indicated for the symptomatic relief of non-infectious diarrhea in adult patients living with HIV/AIDS on antiretroviral therapy (sometimes referred to herein as ART). The active pharmaceutical ingredient (sometimes referred to herein as API) in Mytesi® is crofelemer, Napo's proprietary, patented gastrointestinal anti-secretory agent sustainably harvested from the rainforest.

In March 2016, Napo settled ongoing litigation with Salix Pharmaceuticals, Inc. (sometimes referred to herein as Salix) (now owned by Valeant Pharmaceuticals International) and rights to develop, manufacture and commercialize crofelemer previously licensed to Salix in December 2008 in North America, certain European Union countries and Japan were terminated and returned to Napo, along with certain crofelemer active pharmaceutical ingredient inventory, Mytesi® drug product inventory and land. Napo recorded the inventory received at its manufactured cost and the land at its appraised value and recorded a gain on settlement of litigation of \$1,888,319.

Jaguar was a majority-owned subsidiary of Napo until the close of its initial public offering (sometimes referred to herein as IPO) on May 18, 2015. Jaguar was formed to develop and commercialize first-in-class gastrointestinal products for companion and production animals and horses. Jaguar's first commercial product, Neonorm Calf, was launched in 2014. On May 18, 2015, Jaguar completed an IPO of its common stock at a price to the public of \$7.00 per share. In connection with the IPO, Napo deconsolidated Jaguar on this date due to a reduction in its ownership interest in Jaguar. Subsequent to the IPO, Napo owned approximately 33%, 33% and 19% of the outstanding shares of Jaguar at May 18, 2015, December 31, 2015 and December 31, 2016, respectively. Accordingly, management concluded that Napo was able to have significant influence over the operations of Jaguar. Subsequent to Jaguar's IPO, Napo has accounted for its holding in Jaguar using the equity method of accounting.

Effective July 1, 2016, Napo and Jaguar entered into an employee leasing and overhead allocation agreement (sometimes referred to herein as the 2016 Service Agreement). The initial term of the 2016 Service Agreement was from July 1, 2016 to December 31, 2016, and the term has been extended until the completion of a successful merger between the two companies, or until the proposed merger has been terminated. In connection with the 2016 Service Agreement, Jaguar provided to Napo the services of Jaguar employees, primarily in the areas of supply, manufacturing and quality control and general administrative positions. The 2016 Service Agreement stipulated that Napo reimburse Jaguar for a portion of Jaguar's overhead costs including an allocated amount for rent.

Recent Events

Merger

On March 31, 2017, Napo and Jaguar announced the signing of a definitive merger agreement (sometimes referred to herein as the merger agreement). Under the terms of merger agreement, Jaguar's stockholders and option and warrant holders calculated on a fully diluted basis as of March 31, 2017 (excluding approximately 365,437 shares issuable under securities convertible at \$5.00 or more per share) will hold approximately 25% of the total outstanding fully diluted equity of Jaguar. Conversely, the balance of the outstanding fully diluted equity of Jaguar will be held by existing Napo creditors, RSU, option and warrant holders together with new convertible debt and equity investors upon consummation of the merger.

Table of Contents

At the effective time of the merger, each issued and outstanding share of Napo common stock (other than dissenting shares and shares held by Jaguar or Napo) will be converted into a contingent right to receive up to a whole number of shares of Jaguar common stock comprising in the aggregate up to approximately 21.5% of the fully diluted shares of Jaguar common stock immediately following the consummation of the merger, which contingent right will vest only if the resale of certain shares of Jaguar common stock (sometimes referred to herein as the Tranche A Shares) issued by Jaguar to Nantucket Investments Limited (sometimes referred to herein as Nantucket) pursuant to the Napo debt settlement provides Nantucket with specified cash returns over a specified period of time (sometimes referred to herein as the Hurdle Amounts). In addition, if such Hurdle Amount is achieved before all of such Tranche A Shares are sold, then 50% of the remaining unsold Tranche A Shares will be distributed pro rata among the Napo Stockholders and RSU holders. The proposed merger remains subject to customary conditions to closing, including but not limited to regulatory approvals inclusive of the effectiveness of the S-4 Registration Statement, debt limitations of Napo, absence of any material adverse change in the business, results of operations or condition (financial or otherwise) of either party and stockholder approval from each party.

Refinancing

On March 31, 2017, Napo entered into a settlement and discounted payoff agreement (sometimes referred to herein as the Nantucket Settlement Agreement), with the lenders party to Napo's existing financing agreement, dated as of October 10, 2014 (sometimes referred to herein as the Financing Agreement), and Nantucket, as collateral agent and administrative agent pursuant to which Napo agreed, simultaneously with the consummation of the merger, (a) to make a cash payment to Nantucket of either \$8 million or \$8.5 million (depending upon the percentage of outstanding common stock represented by the shares released in the following clause (b)), which will reduce the outstanding principal obligations under the Financing Agreement, and (b) in satisfaction as a compromise for the outstanding obligations under the Financing Agreement and the release of any lien or security interest in respect of such outstanding obligations, (x) to transfer to Nantucket 2,666,666 shares of Jaguar common stock owned by Napo and (y) to cause Jaguar to issue to Nantucket 1,940,382 newly issued shares of Jaguar voting common stock and 38,380,028 newly issued shares of Jaguar non-voting common stock, which shares are subject to the terms of the Investor Rights Agreement described below.

Napo also entered into settlement agreements with certain additional creditors on or about March 31, 2017, pursuant to which Napo agreed to cause Jaguar to issue in the aggregate 4,722,567 shares of Jaguar non-voting common stock and warrants to purchase 1,237,283 shares of Jaguar common stock, with an exercise price of \$0.08 per share, to such creditors upon consummation of the merger as a complete settlement and satisfaction of Napo's outstanding obligations to such creditors. Jaguar also agreed to register the resale of these shares on one or more registration statements.

In connection with the execution of the merger agreement and the Nantucket Settlement Agreement, Jaguar and Nantucket entered into an Investor Rights Agreement, dated March 31, 2017 (sometimes referred to herein as the Investor Rights Agreement) pursuant to which, among other things, Jaguar agreed to register the resale of the shares issued to Nantucket pursuant to the Nantucket Settlement Agreement on one or more registration statements. A portion of these shares will be held in escrow and released to either Nantucket or the former Napo stockholders, depending on whether Nantucket receives sufficient proceeds from the resale of the Tranche A Shares to third parties to satisfy the Hurdle Amounts. The Investor Rights Agreement also provides that Jaguar cannot pay any dividends on any shares of its capital stock or redeem any shares, except in limited circumstances, without the prior written consent of Nantucket.

Table of Contents

Promissory Note Issuances

On March 1, 2017, Napo entered into a convertible note purchase agreement with two lenders for the funding of \$1,050,000 (face amount of \$1,312,500) in two \$525,000 tranches (face amount \$656,250). The notes bear interest at 3% and mature on December 1, 2017. Interest may be paid at maturity in either cash or shares of Jaguar, provided that if Jaguar is not listed on Nasdaq or the Bulletin Board or registered under the Securities Act then interest must be paid in cash. Assuming the funding of \$1,050,000, the notes may be exchanged for up to 2,343,752 shares of Jaguar common stock, prior to maturity date assuming that either the merger of Napo and Jaguar has occurred, among other conditions. Napo received funding of \$525,000 on March 1, 2017, and recorded \$106,250 of original issue discount and \$25,000 of debt issuance costs. Under the merger agreement, Jaguar is required to register the maximum number of shares of Jaguar common stock issuable in connection with interest payments under the promissory notes.

On March 31, 2017, Napo entered into an Amended and Restated Note Purchase Agreement (sometimes referred to herein as the Kingdon NPA) with Kingdon Associates, M. Kingdon Offshore Master Fund L.P., Kingdon Family Partnership, L.P., and Kingdon Credit Master Fund L.P. (and, together with any other party purchasing Kingdon Notes (as defined below) pursuant to the Kingdon NPA, sometimes collectively referred to herein as the Kingdon Purchasers), under which remains outstanding \$2,500,000 in aggregate principal amount of convertible promissory notes (sometimes referred to herein as the Kingdon Notes) issued by Napo on December 31, 2016 to such purchasers at a purchase price of \$2,000,000. Subject to the consummation of the merger, the holders of the Kingdon Notes may convert the Kingdon Notes into shares of Jaguar common stock at a conversion price of \$0.925 (i) from the date of the Kingdon Note until the day immediately preceding the one-year anniversary of the Kingdon Note, all, but not less than all, of one-third of the outstanding principal and interest of the Kingdon Note, (ii) from the one-year anniversary of the Kingdon Note until the day immediately preceding the two-year anniversary of the Kingdon Note, all, but not less than all, of an additional one-third of the outstanding principal and interest of the Kingdon Note, and (iii) from the two-year anniversary of the Kingdon Note and thereafter, all, but not less than all, of the outstanding principal and interest of the Kingdon Note. Subject to the satisfaction of certain conditions, each Kingdon Purchaser is required to purchase its pro rata portion of additional Kingdon Notes with an aggregate original principal amount of \$7,500,000 for an aggregate purchase price of \$6,000,000, which subsequent purchase will occur simultaneously with the consummation of the merger and with effect as of immediately prior to the consummation of the merger.

The Kingdon Notes accrue interest at a rate of 10% per annum and mature on the first date after December 30, 2019 on which a majority of the Kingdon Purchasers have provided written notice to Napo requesting payment in full of the outstanding principal and interest of the Kingdon Notes. The obligations of Napo under the Kingdon Notes are secured pursuant to the terms of the Security Agreement, dated December 30, 2016, by and among Napo, Kingdon Capital Management L.L.C. and the purchasers named therein (sometimes referred to herein as the Napo Security Agreement) and the Limited Subordination Agreement, dated December 30, 2016, by and among Napo, the Kingdon Purchasers, Nantucket, the lenders under the Financing Agreement, Dorsar Investment Company, Alco Investment Company and Two Daughters LLC (sometimes referred to herein as the Intercreditor Agreement). Jaguar has agreed to file a registration statement to register the resale of shares of Jaguar common stock issuable upon exchange of the 2017 Exchangeable Notes within 30 days of the earlier of the effective date of the merger and the merger termination date.

Revenue

Napo sells its drug product, Mytesi®, on consignment through one distributor, that in turn sells to various wholesalers around the United States. Sales to the wholesalers are made under agreements that may provide price adjustments and rights of return prior to sell through. Until the Company develops

Table of Contents

sufficient sales history and pipeline visibility, revenue and costs of distributor sales to wholesalers will be deferred until products are sold by the wholesaler to the wholesaler's customers. The Company had \$987,312 and \$390,953 of revenue (including royalties received) for the years ended December 31, 2016 and 2015, respectively.

Napo received royalty payments on a quarterly basis in 2015 and up to March 4, 2016. Royalties received equaled \$32,092 and \$276,999 in the years ended December 31, 2016 and 2015, respectively. These royalties are recognized in the period in which sales are made by the licensee.

For the year ended December 31, 2016, substantially of Napo's revenue was derived from sales of Mytesi®. In the year ended December 31, 2015, the majority of Napo revenues consisted of royalties received pursuant to Napo's collaboration with Salix Pharmaceuticals, Inc., with approximately 20% of revenue derived from Jaguar sales of Neonorm Calf, Jaguar's anti-diarrheal for neo-natal calves.

Research and Development Expense

In 2015, research and development expenses consist primarily of clinical and contract manufacturing expense, personnel and related benefit expense; and, with respect to the consolidated operating results of Jaguar for the first five months of 2015, includes stock-based compensation expense, employee travel expense, reforestation expenses. Clinical and contract manufacturing expense included in operating results in 2015 consists primarily of costs to conduct stability, safety and efficacy studies, and manufacturing startup expenses.

Napo conducted limited research and development in the year ended December 31, 2016. Expenditures in the year ended December 31, 2015 represent primarily the consolidated operating results of Jaguar for the period from January to May 18, 2015. Research and development activities are projected to increase significantly in 2017 and beyond.

The timing and amount of Napo's future research and development expenses will depend largely upon its ability to attract potential development and commercialization partners, capital availability as well as the outcomes of current and future trials for its prescription drug product candidates as well as the related regulatory requirements, the outcomes of current and future formulation studies for its non-prescription products, manufacturing costs and any costs associated with the advancement of its line extension programs. Napo cannot determine with certainty the duration and completion costs of the current or future development activities.

The duration, costs and timing of trials, formulation studies and development of Napo's prescription drug will depend on a variety of factors, including:

the scope, rate of progress, and expense of Napo's ongoing, as well as any additional clinical trials, formulation studies and other research and development activities;

future clinical trial and formulation study results;

potential changes in government regulations; and

the timing and receipt of any regulatory approvals.

A change in the outcome of any of these variables with respect to the development of a prescription drug product candidate could mean a significant change in the costs and timing associated with Napo's development activities.

Napo expects research and development expense to increase significantly as it adds personnel, commences additional clinical studies and performs other activities to develop its prescription drug product candidates.

Table of Contents

Sales and Marketing Expense

Sales and marketing expenses in 2016 consist primarily of contracted amounts paid to a distribution and marketing firm and to a marketing and commercialization advisory firm, in addition to direct expenses for the promotion and marketing of Mytesi®, travel expense, and participation in conferences.

Napo expect sales and marketing expense to increase significantly as it develops and commercializes new products and grows its existing Mytesi® market. Napo plans to add sales and marketing headcount to promote the sales of Mytesi® product.

General and Administrative Expenses

General and administrative expenses consist of personnel and related benefit expense, stock-based compensation expense (Jaguar only in 2015), employee travel expense, legal and accounting fees, rent and facilities expense, reimbursement of the services provided by Jaguar Animal Health personnel and related benefits expenses associated therewith, and management consulting expense.

Napo expects general and administrative expense to increase in order to enable it to effectively manage the overall growth of the business. This will include adding headcount, enhancing information systems and potentially expanding corporate facilities.

Interest Expense

Interest expense in 2015 and 2016 consists primarily of interest expense on convertible promissory notes and interest on the principal balance and penalties associated with the Financing Agreement. Interest expense in 2015, inclusive of Jaguar's operations, was \$8,048,764, of which \$6,367,471 was attributable to Napo. In 2016, interest expense was \$15,609,092. See "Description of Indebtedness Financing Agreement."

Results of Operations

As a result of the settlement of its litigation with Salix and the termination of the license of crofelemer to Salix, Napo now has exclusive rights to crofelemer worldwide for the indication of diarrhea predominant irritable bowel syndrome and all other human indications, except for HIV/AIDS, adult infectious diarrhea and pediatric diarrhea in 140 countries (mainly outside of the United State, western EU countries and Japan) and China.

The manufacture and sale of Mytesi® has necessitated higher expenditures on inventory and commercialization efforts by Napo and has resulted in significant initial costs with regard to manufacturing, quality and general and administrative personnel and marketing and commercialization consultants. Napo entered into an Employee Leasing and Overhead Allocation Agreement with regard to the use of Jaguar personnel for certain of these activities.

Future development and commercialization of other indications of crofelemer will require capital far in excess of what Napo currently has and Napo therefore intends to rely on licensing opportunities as well as additional capital raises.

Napo sources the raw material for crofelemer active pharmaceutical ingredient from the Croton lechleri tree which grows in South America in countries along the Amazon Basin. Purchases are denominated in dollars, as are agreements with Napo's API contract manufacturer, based in India. Currently, Napo has only one FDA-approved manufacturer of crofelemer API, although that manufacturer is able to produce crofelemer API at two separate facilities, though one has significantly less capacity than the other. The capacity of the smaller site alone is adequate for the current levels of Mytesi sales.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Inflation has had no material effect on Napo's results for the years ended December 31, 2016 and 2015. Currently Napo does not foresee a significant effect on its operations from raw material price inflation.

Comparison of the years ended December 31, 2016 and 2015

The following table summarizes Napo's results of operations with respect to the items set forth in such table for the years ended December 31, 2016 and 2015, together with the change in such items in dollars and as a percentage:

	Years Ended December 31,		Variance	
	2016	2015	(\$)	(%)
Revenue	\$ 987,312	\$ 390,953	596,359	152.5%
Operating Expenses				
Cost of revenue	726,506	174,949	551,557	315.3%
Gross profit	260,806	216,004	44,802	20.7%
Research and development expense	127,137	1,672,472	(1,545,335)	92.4%
Selling, general and administrative	2,725,925	2,618,066	107,859	4.1%
Total operating expenses	2,853,062	4,290,538	(1,437,476)	33.5%
Loss from operations	(2,592,256)	(4,074,534)	1,482,278	36.4%
Interest expense, net	(15,609,092)	(8,048,674)	(7,560,418)	93.9%
Gain on disposition of related party		29,961,150	(29,961,150)	100.0%
Impairment	(574,059)	(9,751,974)	9,177,915	94.1%
Gain on litigation settlement	1,888,316		1,888,316	
Change in fair value of warrants		(267,867)	267,867	100.0%
Loss from equity method investment in related party	(3,505,940)	(2,915,090)	(590,850)	20.3%
Consolidated net income (loss)	(20,393,028)	4,903,011	(25,296,039)	515.9%
Net loss attributable to non-controlling interest		406,150	(406,150)	100.0%
Net loss and comprehensive loss	\$ (20,393,028)	\$ 5,309,161	(25,702,189)	484.1%

Revenue and Cost of Revenue

Revenue and related cost of revenue for the years ended December 31, 2016 reflects net sales of Mytesi® by Napo from June to December 31, 2016. Included in revenue is approximately \$32,000 of royalty income from Salix's sales of Mytesi® in Q1 2016. Cost of revenue is comprised of the manufactured price of Mytesi®, plus the allocated costs of manufacturing and quality personnel as well as freight. Cost of revenue for Mytesi is higher as a percentage of net sales as a result of the initial costs of adding supply, quality and manufacturing personnel and establishing and implementing quality assurance and control procedures.

For the year ended December 31, 2015, revenue is primarily comprised of royalties received from Salix from its net sales of Mytesi® (formerly known as Fulyzaq) and approximately \$77,000 of revenue from sales of Neonorm calf. Cost of revenue in the year ended December 31, 2015 relates to royalties payable to third parties on the net sales of Mytesi® by Salix and the inclusion of Jaguar cost of revenue for sales of Neonorm Calf.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Research and Development Expense

The following table presents the components of research and development expense for the years ended December 31, 2016 and 2015, together with the change in such components in dollars and as a percentage. Research and development expenses in 2015 include five months of Jaguar activity and accordingly 2016 is not comparable due to the limited amount of research and development activity conducted by Napo.

	Years Ended December 31,			
	2016	2015	Variance	Variance %
R&D:				
Personnel and related benefits	\$ 127,137	\$ 599,557	\$ (472,420)	371.6%
Materials expense and tree planting		19,000	\$ (19,000)	100.0%
Travel, other expenses		50,418	\$ (50,418)	100.0%
Clinical and contract manufacturing		936,589	\$ (936,589)	100.0%
Stock-based compensation		38,133	\$ (38,133)	100.0%
Other		28,775	\$ (28,775)	100.0%
Total	\$ 127,137	\$ 1,672,472	\$ (1,545,335)	1,215.5%

Napo decreased research and development expense \$1,545,335 from \$1,672,472 in the year ended December 31, 2015 to \$127,137 for the same period in 2016. Research and development expense in 2016 of \$127,137 was related to personnel and third party consulting expense. The consolidation of Jaguar research and development expenses for the first five months of 2015 accounted for \$1,617,857 of the \$1,672,472 of research and development expense in 2015. Clinical trial and contract manufacturing expenses decreased \$936,589 because Napo conducted no clinical trial activity in 2016 and all Napo manufacturing activity in 2016 was devoted to manufacturing inventory of Mytesi®.

Selling, General and Administrative Expense

The following table presents the components of general and administrative expense for the years ended December 31, 2016 and 2015 together with the change in such components in dollars and as a percentage:

	Years Ended December 31,			
	2016	2015	Variance	Variance %
G&A:				
Personnel and related benefits	\$ 311,303	\$ 853,488	(542,185)	63.5%
Accounting fees		53,413	229,195	(175,782)
Third-party consulting fees and Jaguar service fees		732,875	101,609	631,266
Legal fees		547,562	797,584	(250,022)
Travel		117,345	178,655	(61,311)
Stock-based compensation			31,011	(31,011)
Rent and lease expense			70,770	(70,770)
Marketing, commercialization		730,252	41,706	688,546
Other		233,175	314,048	(80,873)
Total	\$ 2,725,925	\$ 2,618,066	\$ 107,859	4.1%

Table of Contents

Napo's selling, general and administrative expenses increased \$107,859 from \$2,618,066 in the year ended December 31, 2015 to \$2,725,925 for the same period in 2016. The consolidation of Jaguar results for five months in 2015 accounted for \$1,766,388 of the \$2,618,066 of general and administrative expense in 2015. Napo's third-party consulting fees and service fees increased \$631,266 from \$101,609 in the year ended December 31, 2015 compared to \$732,875 in the same period in 2016. In 2016, Napo entered into an Employee Lease and Overhead Allocation Agreement whereby Napo was billed \$628,867 for the services of Jaguar employees in the areas of quality, manufacturing, supply and other general and administrative areas in 2016. Napo also incurred fees for regulatory consultants in 2016 which is included in third party consulting fees. Napo had one employee in 2016. Stock-based compensation decreased from \$31,011, attributable to the consolidation of Jaguar, in the year ended December 31, 2015 to \$0 in the same period in 2016 as Napo had no stock based compensation expense in 2016. Napo's legal fees decreased \$250,022 from \$797,584 in the year ended December 31, 2015 compared to \$547,562 in the same period in 2016. In 2016 Napo incurred significant legal costs with regard to the negotiation of the Settlement, Termination, Asset Transfer and Transition Agreement with Salix which settled the litigation between the companies and returned the rights to crofelemer, including Mytesi® to Napo. Other significant legal expense was associated with the return and administration of the intellectual property associated with crofelemer. Napo also incurred significant marketing and commercialization expenses of \$730,252 in 2016 associated with efforts to promote and sell Mytesi®. Such costs are projected to increase significantly in 2017. An allocation of rent expense was charged to Napo by Jaguar in 2016 and is included in third party consulting and service fees. Such charges were relatively insignificant. Other expenses, including insurance costs decreased from 2015 as a result of the deconsolidation of Jaguar after May 2015 and Napo's relatively lower level of operations in 2016.

Liquidity and Capital Resources

Sources of Liquidity

Since inception, Napo has incurred net losses and negative cash flows from operations, and, as of December 31, 2016, Napo had an accumulated deficit of \$157,438,301. Substantially all of Napo's net losses resulted from costs incurred in connection with its research and development programs, stock-based compensation, interest expense and from general and administrative costs associated with its operations through December 31, 2016.

As of December 31, 2016, Napo had cash, cash equivalents, and short-term investments of \$2,271,745. A substantial portion of Napo's cash at December 31, 2016 was the result of the issuance of \$2.5 million of convertible notes. In the near term, Napo does not expect to incur significant expenditures planned for manufacturing equipment. However, without completion of the merger and/or the concurrent financing contemplated by the merger agreement, Napo does not believe its current capital resources are sufficient to fund its planned operations for the next 12-months. Napo's independent auditor has included an explanatory paragraph in its audit report included with Napo's financial statements attached hereto regarding Napo's assessment of substantial doubt about its ability to continue as a going concern. Napo's financial statements do not include any adjustments that may result from the outcome of this uncertainty.

Napo will continue to require substantial additional capital to continue its clinical development activities. The amount and timing of Napo's future funding requirements will depend on many factors, including its ability to attract development and licensing partners and the pace and results of its clinical development efforts. Failure to raise capital as and when needed, on favorable terms or at all, would have a negative impact on Napo's financial condition and its ability to develop its product candidates.

Table of Contents

The following table shows a summary of cash flows for the years ended December 31, 2016 and, 2015:

	Years Ended December 31,	
	2016	2015
Total (cash used in)/provided by operations	\$ (474,192)	\$ 960,119
Total cash provided by/(used in) investing activities		
Total cash provided by/(used in) financing activities, net	1,919,790	(1,066,716)
	\$ 1,445,598	\$ (106,597)

Cash Used in Operating Activities

During the year ended December 31, 2016, cash used in operating activities of \$(474,192) resulted from Napo's net loss of \$20,393,028, offset by non-cash accretion of interest and penalties on the Financing Agreement of \$14,590,719; the equity method loss and impairment on Napo's investment in Jaguar of \$4,079,999, the receipt of license fees from Jaguar of \$425,000, a gain of \$1,888,319 on the settlement with Salix and other changes in operating assets and liabilities of \$2,711,437.

During the year ended December 31, 2015, cash provided by operating activities of \$960,119 resulted from Napo's net income of \$5,309,161, offset by a non-cash gain on the Jaguar investment of \$29,961,150, the deconsolidation of Jaguar of \$7,272,553 offset by a gain attributable to the non-controlling interest in Jaguar of \$406,150; the equity method loss and impairment on Napo's investment in Jaguar of \$12,667,064; non-cash interest of \$5,997,784 on the Financing Agreement; the receipt of \$1,225,000 of license fees from Jaguar; and, other changes in operating assets and liabilities of \$1,144,143.

Cash Provided By/Used In Investing Activities

During the year ended December 31, 2016, cash provided by investing activities was \$0.

During the year ended December 31, 2015, cash used in investing activities was \$0.

Cash Provided by Financing Activities

During the year ended December 31, 2016, cash provided by financing activities of \$1,919,790 consisted of long term convertible debt of \$2,500,000, offset by debt discount and issuance costs of \$580,210.

During the year ended December 31, 2015, cash used by financing activities of \$1,066,716 primarily consisted of payments made of \$250,000 on Napo's convertible notes due June 30, 2015 and payments of \$816,716 made by Jaguar.

Description of Indebtedness***Financing Agreement***

In December 2011 and April 2013, Napo entered into a Forward Purchase Agreement(s) (together, the "Agreements") with a third party (the "Purchaser") to provide funding for Napo's litigation activities with Salix and its arbitration with Glenmark Pharmaceuticals Limited. The terms of the Agreements included a return on funds advanced, depending upon the amount of time lapsed from the initial funding, in the event Napo was successful in any part of its litigation or arbitration. In October 2014, Napo and the Purchaser restructured what had become the existing debt under Agreements into a note (the "Financing Agreement") with a principal amount of \$30,000,000 due January 1, 2017, and

Table of Contents

Napo recognized a gain on the restructuring of the debt. The loan under the Financing Agreement accrues interest monthly at 18% per annum, with monthly accrued interest added to principal on the first day of the following month.

From July 2014 to March 2016, a portion of the royalties received by Napo from the Salix Collaboration Agreement was paid into a control account for the benefit of the Purchaser and such funds reduced the outstanding balance on the Financing Agreement. In March 2016, subsequent to the settlement of the litigation with Salix and the return of the licensed assets to Napo, the Purchaser and Napo entered into an amendment to the Financing Agreement which provided for payments by Napo to the Purchaser of 10% of net sales of Mytesi® on a quarterly basis.

The Purchaser has a security interest (the "Security Interest") on all Napo assets, including 2,666,666 shares of Jaguar owned by Napo. The Financing Agreement requires that any funds Napo receives from sales of assets, recoveries, etc. be used to pay interest or principal on the Financing Agreement.

All principal and interest on the Financing Agreement was due on January 1, 2017. The outstanding balance owed was \$51,256,639 and \$36,203,421 as of December 31, 2016 and 2015, respectively, inclusive of accrued interest added to principal of \$20,588,503 and \$5,997,784 at December 31, 2016 and December 31, 2015. The amounts owed under the Financing Agreement will be settled at the closing of the merger pursuant to the Nantucket Settlement Agreement. See "Recent Events Refinancing", "Certain Relationships and Related Transactions of Jaguar Financings Nantucket Settlement Agreement" and "The Merger Agreement and Related Agreements Settlement Agreements and Investor Rights Agreement".

Convertible Notes Due June 30, 2015

In March 2011 Napo entered into three convertible notes (the "Convertible Notes") equaling \$1,575,000 with an original due date of March 18, 2014 with interest on the outstanding principal amount bearing interest at 20%. The Convertible Notes and underlying principal, interest rates, maturity dates, payment terms, and collateral were amended at various times through January 2016. The first amendment provided that the lenders (the "Lenders") were to receive 100% of the payments made to Napo pursuant to the License Agreement with Jaguar Animal Health, Inc., after the first \$250,000 payment to Napo. The first payment of \$250,000 was made in 2015. The amended maturity date of the Convertible Notes was June 30, 2015.

In October 2015, the Lenders and Napo entered into a further amendment of the Convertible Notes. As part of the amendment, the Lenders agreed to reduce the level of payments made by Napo to 50% of the payments received by Napo from Jaguar Animal Health, Inc. under the License Agreement. The interest on the Convertible Notes was then increased from 12% to 15%, as of April 1, 2015 because Napo had made no interest payments as required beginning on April 1, 2015. All other terms remained the same.

In January 2016, effective as of December 31, 2015, the Lenders and Napo agreed to a reduction of \$100,000 in the payment due to the Lenders as of December 31, 2015 from Napo's License Agreement with Jaguar Animal Health, Inc. and that \$100,000 would be added to the next payment to be made by Napo to the Lenders on March 31, 2016 when Napo received its final payment under the License Agreement.

In connection with the amendments made to the Convertible Notes, Napo has issued warrants to the lenders at various times. As of December 31, 2016 and 2015, the Convertible Note Lenders collectively hold warrants to purchase 1,916,137 shares of common stock.

The Convertible Notes have certain covenants prohibiting investments in new subsidiaries and, restrict the issuance of stock compensation to Napo employees, consultants or others without the

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

express written consent of Dorsar Investment Company, one of the Lenders and restrict Napo from incurring any debt with superior rights than those of the Lenders, without their consent. The Convertible Notes have a second lien on Napo assets and a pledge of common stock owned by Lisa A. Conte. Napo cannot distribute to its shareholders any shares Napo owns of Jaguar Animal Health, Inc. The principal balance owed was \$1,321,151 and \$1,783,650 as of December 31, 2016 and 2015 respectively. The interest due on the principal balance was \$653,683 and \$442,935 as of December 31, 2016 and 2015, respectively.

Convertible Notes Due December 2019

In December 2016, Napo entered into a note purchase agreement which provides for the sale of up to \$12,500,000 face amount of notes and issued convertible promissory note(s) (the December Notes) in the aggregate face amount of \$2,500,000 to three lenders and received proceeds of \$2,000,000 which resulted in \$500,000 of original issue discount. The carrying amount of the December Notes is reduced by \$80,210 on the balance sheet for debt issuance costs. Any subsequent note purchases will be at the sole discretion of the purchaser and will be issued at similar original issue discount as the December Notes.

The December Notes mature on December 30, 2019 and bear interest at 10% with interest due each six-month period after December 30, 2016. Interest on these notes was immaterial for the year ended December 31, 2016. If Napo merges with Jaguar, at the option of Napo, interest may be paid in cash or in the stock of Jaguar, but if Jaguar is not listed on Nasdaq or the OTC bulletin board, then interest must be paid in cash. If Napo merges with Jaguar, then in each one year period beginning December 30, 2016, up to one-third of the principal and accrued interest on the December Notes may be converted into the common stock of the merged entity at a conversion price of \$0.935 per share. The December Notes are secured by a security interest in Napo inventory pursuant to a limited subordination agreement between Napo, the December Note purchasers and the Convertible Note Lenders and the Lender associated with the Financing Agreement. The principal balance owed was \$2,500,000 and \$0 as of December 31, 2016 and 2015, respectively. The interest due on the principal balance was \$1,366 and \$0 as of December 31, 2016 and 2015, respectively.

The following is a schedule of Napo's debt:

Debt	Borrowings December 31, 2016	Borrowings December 31, 2015
Current:		
Financing Agreement	\$ 51,256,639	\$
Convertible Notes due June 30, 2015	1,321,151	1,783,650
Total current borrowings:	52,577,790	1,783,650
Long term debt:		
Financing Agreement		36,203,421
Settlement Liability(1)	2,500,000	2,500,000
Convertible Notes, net, due December 30, 2019	1,919,790	
Total long term borrowings:	4,419,790	38,703,421
Total:	\$ 56,997,580	\$ 40,487,071

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

The following table sets forth scheduled future principal payments as of December 31, 2016:

Amounts Due in Years Ending December 31,	Principal Amount
2017	\$ 52,577,790
2018	
2019	2,500,000
Thereafter(1)	2,500,000
Total:	\$ 57,577,790

- (1) Settlement liability is payable out of royalties to be paid pursuant to a collaboration agreement with Glenmark Pharmaceuticals Limited. See Note 5 and Note 12 to the financial statements. Napo has received no royalties from the its collaboration agreement with Glenmark and is unable to determine when, if ever, such royalties will be received.

Warrants

Napo's issuance of warrants to purchase Napo common stock is summarized in the table below. All outstanding warrants to purchase common stock have been issued in connection with various debt and equity financings between 2008 and 2014, including amendments and refinancings, to entities including Dorsar Partners, LP, Dorsar Investment Company, Continental Properties, Alco Investment Company, Two Daughters LLC and/or entities affiliated with the principals thereof.

Shares underlying warrants	Exercise price	Expiration Date
411,047	\$ 0.200000	December 31, 2018
387,849	\$ 0.550000	December 31, 2018
3,361,080	\$ 0.194163	December 31, 2025
688,953	\$ 0.200000	December 31, 2025
1,155,560	\$ 0.550000	December 31, 2025
722,954	\$ 0.553280	December 31, 2025
6,727,443		

Indian Subsidiaries

Napo has three subsidiary companies (the "Subsidiary Companies") in India. These entities have had limited operations for several years, however certain of them have deficit balances. In connection with funding arrangements entered into by an investor in the Subsidiary Companies, the investor may require the Subsidiary Companies to redeem certain assets and distribute the proceeds to the investor. Napo believes that assets subject to redemption have little or no value, however the investor may require redemption for certain administrative or legal purposes. Under Indian law an entity may not make distributions to investors if they are in a net deficit position. While the estimated fair value of the redeemable assets is immaterial, Napo may have to contribute additional funds to the Subsidiary Companies to remove any net deficit in order for the redemption to proceed. Napo estimates that amount of such contribution, if any, to the Subsidiary Companies would be \$250,000 or less.

On March 16, 2017, Napo received a communication from the investor in the Subsidiary Companies that it intended to exercise its redemption right.

Table of Contents

Income Taxes

A valuation allowance is provided when it is more likely than not that the deferred tax assets will not be realized. Napo has established a valuation allowance to offset net deferred tax assets as of December 31, 2016 and 2015, due to the uncertainty of realizing future tax benefits from its net operating loss carryforwards and other deferred tax assets. As of December 31, 2016, Napo had federal and California net operating loss carryovers of approximately \$85.4 million and \$83.1 million, respectively. The federal and California net operating losses will begin to expire in 2033.

As of December 31, 2016, Napo had federal and California research credit carryovers of approximately \$1.3 million and \$0.8 million, respectively. The federal research credits will begin to expire in 2033. The California research credits carry forward indefinitely.

The Tax Reform Act of 1986 limits the use of net operating loss and tax credit carryforward in certain situations where changes occur in the stock ownership of a company. Due to Napo's cumulative loss position, Napo has not determined whether an ownership change has occurred under these provisions. In the event Napo has had a change in ownership, as defined by the tax law, utilization of the carryforwards could be limited.

Critical Accounting Policies and Significant Judgments and Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles, or U.S. GAAP, requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosures in the financial statements. Critical accounting policies are those accounting policies that may be material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and that have a material impact on financial condition or operating performance. While Napo bases its estimates and judgments on its experience and on various other factors that Napo believes to be reasonable under the circumstances, actual results may differ from these estimates under different assumptions or conditions. Napo believes the following significant accounting policies used in the preparation of its financial statements require significant judgments and estimates. For additional information relating to these and other accounting policies, see Note 2 to Napo's audited financial statements, appearing elsewhere in this joint proxy statement/prospectus.

Recent Accounting Pronouncements

In August 2016, the FASB issued Accounting Standards Update No. 2016-15, *Statement of Cash Flows* (Topic 230) ("ASU No. 2016-15"). ASU No. 2016-15 addresses how certain cash receipts and cash payments are presented and classified in the statement of cash flows. ASU No. 2016-15 is effective for the Company in the first quarter of 2018, with early adoption permitted, and is to be applied using a retrospective approach. The Company is expected to adopt the provisions of ASU 2016-15 on January 1, 2017, and the provisions are not expected to have a material impact on the Company's financial position or results of operations.

In June 2016, the FASB issued Accounting Standards Update No. 2016-13, *Financial Instruments - Credit Losses* (Topic 326) ("ASU No. 2016-13"). ASU No. 2016-13 revises the methodology for measuring credit losses on financial instruments and the timing of when such losses are recorded. ASU No. 2016-13 is effective for the Company in the first quarter of 2020, with early adoption permitted, and is to be applied using a modified retrospective approach. The Company is currently evaluating the potential effects of adopting the provisions of ASU No. 2016-13.

In March 2016, the FASB issued Accounting Standards Update No. 2016-06, *Derivatives and Hedging - Contingent Put and Call Options in Debt Instruments* (Topic 815) ("ASU No. 2016-06"). ASU No. 2016-06 clarifies the steps required to assess whether a call or put option meets the criteria for

Table of Contents

bifurcation as an embedded derivative. Effective April 3, 2016, the Company adopted the provisions of ASU No. 2016-06 on a prospective basis. The adoption of the provisions of ASU No. 2016-06 did not materially impact the Company's consolidated financial position or results of operations.

In January 2016, the FASB issued Accounting Standards Update No. 2016-01, *Financial Instruments Recognition and Measurement of Financial Assets and Financial Liabilities* (Topic 825) ("ASU No. 2016-01"). ASU No. 2016-01 revises the classification and measurement of investments in certain equity investments and the presentation of certain fair value changes for certain financial liabilities measured at fair value. ASU No. 2016-01 requires the change in fair value of many equity investments to be recognized in net income. ASU No. 2016-01 is effective for the Company in the first quarter of 2018, with early adoption permitted, and is to be applied prospectively. The Company is currently evaluating the potential effects of adopting the provisions of ASU No. 2016-01.

In November 2015, the FASB issued Accounting Standards Update No. 2015-17, *Income Taxes Balance Sheet Classification of Deferred Taxes* (Topic 740) ("ASU No. 2015-17"). ASU No. 2015-17 requires deferred tax liabilities and assets to be classified as noncurrent in the consolidated balance sheet. ASU No. 2015-17 is effective for the Company in the first quarter of 2017, with early adoption permitted. ASU No. 2015-17 may be applied either prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. Effective October 2, 2016, the Company adopted the provisions of ASU No. 2015-17 on a prospective basis. The adoption of the provisions of ASU No. 2015-17 resulted in a reclassification of deferred tax liabilities and assets from current to noncurrent and did not materially impact the Company's consolidated financial position or results of operations.

In July 2015, the FASB issued Accounting Standards Update No. 2015-11, *Inventory Simplifying the Measurement of Inventory* (Topic 330) ("ASU No. 2015-11"). ASU No. 2015-11 requires an entity to measure inventory within the scope of the update at the lower of cost and net realizable value, and defines net realizable value as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Effective January 1, 2016, the Company adopted the provisions of ASU No. 2015-11 on a prospective basis. The adoption of the provisions of ASU No. 2015-11 did not materially impact the Company's consolidated financial position or results of operations.

In May 2014, the FASB issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers* (Topic 606) ("ASU No. 2014-09"). ASU No. 2014-09 supersedes all existing revenue recognition guidance. Under ASU No. 2014-09, an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU No. 2014-09 is effective for the Company in the first quarter of 2018, with early adoption permitted in the first quarter of 2017. ASU No. 2014-09 allows for either full retrospective or modified retrospective adoption. In March, April, May, and December 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net)* ("ASU No. 2016-08"); ASU No. 2016-10, *Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing* ("ASU No. 2016-10"); ASU No. 2016-12, *Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients* ("ASU No. 2016-12"); and ASU No. 2016-19, *Technical Corrections and Improvements* ("ASU No. 2016-19"), respectively. ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-12, and ASU No. 2016-19 provide supplemental adoption guidance and clarification to ASU No. 2014-09, and must be adopted concurrently with the adoption of ASU No. 2014-09. The Company is currently evaluating the potential effects of adopting the provisions of ASU No. 2014-09, ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-12, and ASU No. 2016-19.

Table of Contents**Market Prices of and Dividends on Napo Common Stock**

There is no established trading market for the Napo common stock. As of March 31, 2017, Napo common stock was held by approximately 275 stockholders of record. No cash dividends have been paid on Napo common stock during the two most recent fiscal years, and Napo does not intend to pay cash dividends on its common stock in the immediate future.

Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The following table sets forth information with respect to the beneficial ownership of Napo's voting securities as of March 31, 2017, the date of the table, by:

each person known by Napo to beneficially own more than 5% of the outstanding shares of its common stock;

each of Napo's named executive officers;

each of Napo's directors; and

all of Napo's directors and executive officers as a group.

Information with respect to beneficial ownership has been furnished by each director, executive officer or beneficial owner of more than 5% of Napo's common stock. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting and investment power with respect to the securities. Except as otherwise provided by footnote, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of Napo common stock shown as beneficially owned by them. The number of shares of Napo common stock used to calculate the percentage ownership of each listed person includes the shares of Napo common stock underlying options or warrants held by such persons that are currently exercisable or exercisable within 60 days of March 31, 2017, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

Percentage of beneficial ownership is based on 108,202,786 shares of Napo common stock outstanding as of March 31, 2017.

Except as otherwise set forth below, the address of each beneficial owner listed in the table below is c/o Napo Pharmaceuticals, Inc., 201 Mission Street, Suite 2375, San Francisco, California 94105.

Name and Address of Beneficial Owner	Title of Class	Amount and Nature of Beneficial Ownership	Percent of Class
5% Stockholders:			
The Bank of New York (Nominees) Limited(1)	Common	38,878,169	35.9%
Bochnowski Family Trust(2)	Common	7,007,020	6.5%
WBW Trust Number One(3)	Common	6,006,175	5.6%
ILFS Holdings(4)	Common	5,600,455	5.2%
Named executive officers and directors:			
Lisa A. Conte(5)	Common	1,394,380	1.3%
Richard W. Fields	Common		
Joshua Mailman(6)	Common	5,135,674	4.7%
Gregory Stock(7)	Common	686,273	0.6%
Charles Thompson(8)	Common	137,000	0.1%
All current executive officers and directors as a group (5 persons)(9)	Common	7,353,327	6.7%

(1) Represents 38,878,169 shares held by entities advised by Invesco Asset Management Limited, a wholly owned subsidiary of Invesco UK Limited and Invesco Limited, a Bermudan company listed on the NYSE.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

- (2) James J. Bochnowski, the chairman of Jaguar's board, is a co-trustee and beneficiary of Bochnowski Family Trust and shares voting and investment control over such shares with his spouse.
- (3) WBW Trust Number One is a Washington state trust, for which William T. Weyerhaeuser is the trustee with sole voting and investment power.
- (4) Represents 5,600,455 shares held by ILFS Holdings.
- (5) Includes (i) 673,380 shares of common stock and (ii) 757,000 shares of common stock issuable under stock options that are exercisable or will become exercisable within 60 days of March 31, 2017. Lisa A. Conte, Napo's interim Chief Executive Officer, is the chief executive officer and president of Jaguar.
- (6) Includes (i) 4,899,321 shares of common stock directly held by Mr. Mailman and (ii) 236,363 shares of common stock held by the Joshua Mailman Foundation. The Joshua Mailman Foundation is an independent foundation founded by Mr. Mailman and he is the President and one of two directors of the foundation. The Joshua Mailman Foundation's principal business address is Hecht and Co., 350 Fifth Ave., 68th Floor, New York, NY 10118.
- (7) Includes (i) 386,273 shares of common stock and (ii) 300,000 shares of common stock issuable under stock options that are exercisable or will become exercisable within 60 days of March 31, 2017.
- (8) Represents 137,000 shares of common stock issuable under stock options that are exercisable or will become exercisable within 60 days of March 31, 2017.
- (9) See footnotes (5) - (8).

Table of Contents**MANAGEMENT OF THE COMBINED COMPANY AFTER THE MERGER****Executive Officers and Directors*****Termination of Current Executive Officers of Napo***

The employment of the current executive officers of Napo is expected to be terminated immediately prior to the completion of the merger.

Executive Officers and Directors of the Combined Company Following the Merger

Following the merger, the combined company's directors will consist of the seven (7) members of Jaguar's current board of directors, James J. Bochnowski, Lisa A. Conte, Folkert W. Kamphuis, Jiahao Qiu, Zhi Yang, Ph.D, John Micek III and Ari Azhir, Ph.D., who are divided into three classes with staggered three-year terms.

The following table lists the names and ages as of April 1, 2017 and positions of the individuals who are expected to serve as executive officers and directors of the combined company upon completion of the merger:

Name	Age	Position
<i>Executive Officers</i>		
Lisa A. Conte	58	Chief Executive Officer, President and Director
Steven R. King, Ph.D.	59	Executive Vice President, Sustainable Supply, Ethnobotanical Research and Intellectual Property and Secretary
Karen S. Wright	61	Chief Financial Officer and Treasurer
<i>Non-Employee Directors</i>		
James J. Bochnowski(1)(2)(3)	73	Chairman of the Board of Directors
Lisa A. Conte	58	Chief Executive Officer, President and Director
Jiahao Qiu(1)	31	Director
Zhi Yang, Ph.D.(1)	61	Director
Folkert W. Kamphuis(2)(3)	57	Director
John Micek III(1)(2)(3)	64	Director
Ari Azhir, Ph.D.(1)(2)	69	Director

- (1) Member of the Audit Committee.
- (2) Member of the Compensation Committee.
- (3) Member of the Nominating Committee.

Executive Officers

Lisa A. Conte. Ms. Conte has served as Jaguar's President, Chief Executive Officer and a member of Jaguar's board of directors since she founded the company in June 2013. From 2001 to 2014, Ms. Conte served as the Chief Executive Officer of Napo Pharmaceuticals, Inc., a biopharmaceutical company she founded in November 2001. In 1989, Ms. Conte founded Shaman Pharmaceuticals, Inc., a natural product pharmaceutical company. Additionally, Ms. Conte is Napo's current Interim Chief Executive Officer and has served as a member of its board of directors since 2001. Ms. Conte is also currently a member of the board of directors of Healing Forest Conservatory, a California not-for-profit public benefit corporation, and the Board of Visitors of the John Sloan Dickey Center for International Understanding, Dartmouth College. Ms. Conte holds an M.S. in Physiology and Pharmacology from the University of California, San Diego, and an M.B.A. and A.B. in Biochemistry from Dartmouth College.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Jaguar believes Ms. Conte is qualified to serve on Jaguar's board of directors due to her extensive knowledge of Jaguar and experience with Jaguar's product and product candidates, as well as her experience managing and raising capital for public and private companies.

Steven R. King, Ph.D. Dr. King has served as Jaguar's Executive Vice President of Sustainable Supply, Ethnobotanical Research and Intellectual Property since March 2014 and as Jaguar's Secretary since September 2014. From 2002 to 2014, Dr. King served as the Senior Vice President of Sustainable Supply, Ethnobotanical Research and Intellectual Property at Napo Pharmaceuticals, Inc. Prior to that, Dr. King served as the Vice President of Ethnobotany and Conservation at Shaman Pharmaceuticals, Inc. Dr. King has been recognized by the International Natural Products and Conservation Community for the creation and dissemination of research on the long-term sustainable harvest and management of *Croton lechleri*, the widespread source of crofelemer. Dr. King is currently a member of the board of directors of Healing Forest Conservatory, a California not-for-profit public benefit corporation. Dr. King holds a Ph.D. in Biology from the Institute of Economic Botany of the New York Botanical Garden and an M.S. in Biology from the City University of New York.

Karen S. Wright. Ms. Wright has served as Jaguar's Chief Financial Officer since December 15, 2015. Prior to joining Jaguar, Ms. Wright served as head of finance for Clene Nanomedicine, Inc., beginning in August 2014. From June 2011 to May 2014, Ms. Wright served as vice president of finance and corporate controller at Veracyte, Inc., and from 2006 to 2011, she served as vice president of finance, corporate controller and principal accounting officer of VIA Pharmaceuticals, Inc. Ms. Wright holds a BS in Accounting and Marketing from the University of California Walter A. Haas School of Business.

Officers serve at the discretion of the Jaguar Board. There is no family relationship between any of the executive officers or between any of the executive officers and Jaguar's directors. There is no arrangement or understanding between any executive officer and any other person pursuant to which the executive officer was selected.

Non-Employee Directors

James J. Bochnowski. Mr. Bochnowski has served as a member of Jaguar's board of directors since February 2014 and as Chairperson of Jaguar's board since June 2014. Since 1988, Mr. Bochnowski has served as the founder and Managing Member of Delphi Ventures, a venture capital firm. In 1980, Mr. Bochnowski co-founded Technology Venture Investors. Mr. Bochnowski holds an M.B.A. from Harvard University Graduate School of Business and a B.S. in Aeronautics and Astronautics from Massachusetts Institute of Technology.

Jaguar believes Mr. Bochnowski is qualified to serve on Jaguar's board of directors due to his significant experience with venture capital backed healthcare companies and experience as both an executive officer and member of the board of directors of numerous companies.

Jiahao Qiu. Mr. Qiu has served as a member of Jaguar's board of directors since February 2014. Mr. Qiu has been employed at BioVeda Management, Ltd., a life science investment firm, as associate (2010-2012), senior associate (2012-2014) and Principal since April 2014. From 2009 to 2010, he served as an interpreter for the Delegation of the European Union to China. Mr. Qiu holds a B.S. in Biotechnology from the Jiao Tong University in Shanghai, China.

Jaguar believes Mr. Qiu is qualified to serve on Jaguar's board of directors due to his experience with evaluating, managing and investing in life science portfolio companies for BioVeda Management, Ltd.

Zhi Yang, Ph.D. Dr. Yang has served as a member of Jaguar's board of directors since February 2014. Since 2005, Dr. Yang has served as the Chairperson, Managing Partner and Founder of BioVeda

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Management, Ltd., a life science investment firm. Dr. Yang is currently an advisor to the China Health and Medical Development Foundation, under China's Ministry of Health. Dr. Yang holds a Ph.D. in Molecular Biology and Biochemistry, as well as an M.A. in Cellular and Developmental Biology, both from Harvard University.

Folkert W. Kamphuis Mr. Kamphuis has served as a member of Jaguar's board of directors since June 2015. Mr. Kamphuis currently has his own consulting business. He most recently served as a member of the Executive Committee of the animal health unit of Swiss pharmaceutical giant Novartis until its acquisition by Elanco. Mr. Kamphuis joined Novartis Animal Health in 2005, and held several executive positions from 2012 to 2014 as General Manager North American and as Chief Operating Officer from 2009 to 2012 and Head of Global Marketing and Business Development from 2005 to 2009. Prior thereto, Mr. Kamphuis spent 20 years in various executive, business development and global marketing roles at Pfizer/Pharmacia Animal Health and Merial/Merck AgVet. Mr. Kamphuis served a total of 10 years on the IFAH-Europe board, of which 9 years as treasurer. Mr. Kamphuis holds a B.A. in Marketing from the Dutch Institute of Marketing, Amsterdam, the Netherlands, and a MSc in Animal Nutrition from the Wageningen University and Research Center, Wageningen, the Netherlands.

Jaguar believes Mr. Kamphuis is qualified to serve on Jaguar's board of directors due to his extensive experience and education in the animal health sector and is an experienced executive and strategist in animal health care companies who designs creative and effective companies.

John Micek III. Mr. Micek has served as a member of Jaguar's board of directors since April 2016. From 2000 to 2010, Mr. Micek was managing director of Silicon Prairie Partners, LP, a Palo Alto, California based family-owned venture fund. Since 2010, Mr. Micek has been managing partner of Verdant Ventures, a merchant bank dedicated to sourcing and funding university and corporate laboratory spinouts in areas including pharmaceuticals and cleantech. Mr. Micek serves on the board of directors of Armanino Foods of Distinction, Innovare Corporation and JAL/Universal Assurors. He is also a board member and the Chief Executive Officer and Chief Financial Officer of Enovo Systems and from March 2014 to August 2015 he served as interim Chief Financial Officer for Smith Electric Vehicles, Inc. Mr. Micek is a cum laude graduate of Santa Clara University and the University of San Francisco School of Law, and is a practicing California attorney specializing in financial services.

Jaguar believes Mr. Micek is qualified to serve on Jaguar's board of directors due to his many years of executive experience in management and on boards of director.

Ari Azhir, Ph.D. Dr. Azhir has served as a member of Jaguar's board of directors since December 2016. Dr. Azhir is an entrepreneur and founder and CEO of two companies focused on central nervous system (CNS) therapeutics: Neuraltus Pharmaceuticals and Neurocea LLC. She has broad experience launching and building life science companies and has successfully commercialized and brought more than 20 healthcare products to market, ranging from small molecule pharmaceuticals for CNS and dermatology to disruptive technologies in medical devices. These technologies include flow cytometry products at Becton Dickinson and ultrasound devices at Accuson, where she held executive management positions. Dr. Azhir has wide-ranging drug development experience and has filed an NDA and gained approval for Luxiq®, a drug that has been successfully commercialized. She also has extensive experience building strong patent portfolios and is the key inventor and patent holder of 12 patents. She serves on the translational research board of UCSF and has served on private boards (Polar Springs and Neuraltus), as well as nonprofit boards (The Hearing Society and American Women in Science). Dr. Azhir received her B.S.C in Biochemistry and Mathematics, as well as her M.Ph. in Biophysics, from Kings' College, London University, and received a PhD. in Biophysics from Tehran University.

Table of Contents

Jaguar believes Dr. Azhir is qualified to serve on Jaguar's board of directors due to her many years of executive experience in management and on boards of director and her human heath experience.

Corporate Governance

Board Composition and Risk Oversight

Jaguar's business and affairs are managed under the direction of its board of directors, which consists of seven members. Six of the seven directors that comprise Jaguar's board are independent within the meaning of the independent director rules of The NASDAQ Stock Market, LLC, or NASDAQ.

Jaguar's board of directors is divided into three classes of directors. At each special meeting of stockholders, a class of directors will be elected for a three-year term to succeed the class whose term is then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the special meeting of stockholders to be held during the years 2017 for the Class II directors, 2018 for the Class III directors and 2019 for the Class I directors.

The Class I directors are Ms. Conte, Mr. Bochnowski and Dr. Azhir.

The Class II directors are Mr. Qiu and Mr. Micek.

The Class III directors are Dr. Yang and Mr. Folkert.

Jaguar expects that any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of Jaguar's board of directors into three classes with staggered three-year terms may delay or prevent a change of its management or a change in control.

Jaguar's board of directors has an active role, as a whole and at the committee level, in overseeing the management of Jaguar's risks. Its board of directors is responsible for general oversight of risks and regular review of information regarding Jaguar's risks, including credit risks, liquidity risks and operational risks. Jaguar's compensation and nominating committees are responsible for overseeing the management of risks relating to Jaguar's executive compensation plans and arrangements and the risks associated with the independence of Jaguar's board of directors and potential conflicts of interest. Jaguar's audit committee is responsible for overseeing the management of Jaguar's risks relating to accounting matters and financial reporting. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, Jaguar's entire board of directors is regularly informed through discussions from committee members about such risks. Jaguar's board of directors believes Jaguar's administration of risk oversight function has not affected the leadership structure of Jaguar's board.

Director Independence

Jaguar's common stock is listed on The NASDAQ Capital Market. Under the NASDAQ rules, independent directors must comprise a majority of a listed company's board of directors. In addition, NASDAQ rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating committee be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Under the NASDAQ rules, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Table of Contents

To be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, Jaguar's board of directors, or any other board committee (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or (2) be an affiliated person of the listed company or any of its subsidiaries.

In February 2017, Jaguar's board of directors undertook a review of its composition, the composition of its committees and the independence of Jaguar's directors and considered whether any director has a material relationship with Jaguar that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, Jaguar's board of directors has determined that six of its seven directors do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the NASDAQ rules. Jaguar's board of directors also determined that Mr. Micek (chairperson), Mr. Bochnowski, Mr. Qiu, Dr. Yang and Dr. Azhir, who comprise Jaguar's Audit Committee, Mr. Bochnowski (chairperson), Mr. Kamphuis, Mr. Micek and Dr. Azhir, who comprise Jaguar's Compensation Committee, and Mr. Bochnowski (chairperson), Mr. Kamphuis and Mr. Micek, who comprise Jaguar's Nominating Committee, satisfy the independence standards for those committees established by applicable SEC rules and the NASDAQ rules and listing standards.

In making this determination, Jaguar's board of directors considered the relationships that each non-employee director has with Jaguar and all other facts and circumstances Jaguar's board of directors deemed relevant in determining independence, including the beneficial ownership of Jaguar's capital stock by each non-employee director.

Meetings and Committees of the Board of Directors

Audit Committee

The members of Jaguar's audit committee are Mr. Micek Mr. Bochnowski, Mr. Qiu, Dr. Yang and Dr. Azhir. Mr. Micek is the chairperson of the audit committee. The audit committee's responsibilities include:

appointing, approving the compensation of, and assessing the independence of Jaguar's registered public accounting firm;

overseeing the work of Jaguar's independent registered public accounting firm, including through the receipt and consideration of reports from that firm;

reviewing and discussing with management and Jaguar's independent registered public accounting firm Jaguar's annual and quarterly financial statements and related disclosures;

monitoring Jaguar's internal control over financial reporting, disclosure controls and procedures and code of conduct;

discussing Jaguar's risk management policies;

establishing policies regarding hiring employees from Jaguar's independent registered public accounting firm and procedures for the receipt and retention of accounting related complaints and concerns;

reviewing and approving or ratifying any related person transactions; and

preparing the audit committee report required by SEC rules.

Table of Contents

The audit committee of the combined company is expected to retain the same members and the same duties and responsibilities following completion of the merger. All audit and non-audit services, other than *de minimis* non-audit services, to be provided to Jaguar by Jaguar's independent registered public accounting firm must be approved in advance by Jaguar's audit committee.

Jaguar's board of directors has determined that each of Mr. Micek, Mr. Bochnowski, Mr. Qiu, Dr. Yang and Dr. Azhir is an independent director under NASDAQ rules and under Rule 10A-3. All members of Jaguar's audit committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and NASDAQ. Jaguar's board of directors has determined that Mr. Micek is an "audit committee financial expert," as defined by applicable SEC rules, and has the requisite financial sophistication as defined under the applicable NASDAQ rules and regulations.

Jaguar's audit committee held one meeting in 2016. The audit committee has adopted a written charter approved by the Jaguar's Board of Directors, which is available on Jaguar's website at: <http://phx.corporate-ir.net/phoenix.zhtml?c=253723&p=irol-govhighlights>

Compensation Committee

The members of Jaguar's compensation committee are Mr. Bochnowski, Mr. Kamphuis, Mr. Micek and Dr. Azhir. Mr. Bochnowski is the chairperson of the compensation committee. The compensation committee's responsibilities include:

determining, or making recommendations to Jaguar's board of directors with respect to, the compensation of Jaguar's Chief Executive Officer;

determining, or making recommendations to Jaguar's board of directors with respect to, the compensation of Jaguar's other executive officers;

overseeing and administering Jaguar's cash and equity incentive plans;

reviewing and making recommendations to Jaguar's board of directors with respect to director compensation;

reviewing and discussing at least annually with management Jaguar's "Compensation Discussion and Analysis" disclosure if and to the extent then required by SEC rules; and

preparing the compensation committee report and necessary disclosure in Jaguar's annual proxy statement in accordance with applicable SEC rules.

The compensation committee of the combined company is expected to retain the same members and the same duties and responsibilities following completion of the merger. Jaguar's board has determined that each of Mr. Bochnowski, Mr. Kamphuis, Mr. Micek and Dr. Azhir is independent under the applicable NASDAQ rules and regulations, is a "non-employee director" as defined in Rule 16b-3 promulgated under the Exchange Act, and is an "outside director" as that term is defined in Section 162(m) of the Internal Revenue Code of 1986, as amended.

Jaguar's Compensation Committee held one meeting in 2016. All compensation-related matters were approved at the Board level. The Compensation Committee has adopted a written charter approved by Jaguar's Board of Directors, which is available on Jaguar's website at: <http://phx.corporate-ir.net/phoenix.zhtml?c=253723&p=irol-govhighlights>

Table of Contents

Nominating Committee

The members of Jaguar's nominating committee are Mr. Bochnowski, Mr. Kamphuis and Mr. Micek. Mr. Bochnowski is the chairperson of the nominating committee. The nominating committee's responsibilities include:

identifying individuals qualified to become members of Jaguar's board of directors;

evaluating qualifications of directors;

recommending to Jaguar's board of directors the persons to be nominated for election as directors and to each of the committees of Jaguar's board of directors; and

overseeing an annual evaluation of Jaguar's board of directors.

The nomination committee of the combined company is expected to retain the same members and the same duties and responsibilities following completion of the merger. Jaguar's Nominating Committee held one meeting in 2016. All nomination-related matters were approved at the Board level. The Nominating Committee has adopted a written charter approved by Jaguar's Board of Directors, which is available on Jaguar's website at: <http://investors.jaguaranimalhealth.com/phoenix.zhtml?c=253723&p=irol-govhighlights>.

Meetings and Attendance During 2016

Jaguar's board held ten meetings in 2016. With one exception (as described below), each director who served as a director during 2016 participated in 75% or more of the meetings of Jaguar's board and of the committees on which he or she served, if any, during the year ended December 31, 2016 (during the period that such director served). Dr. Yang attended one of the ten meetings of the Jaguar Board and all of the meetings of the Audit Committee on which he served during the year ended December 31, 2016.

Jaguar does not have a written policy on board attendance at annual meetings of stockholders. Jaguar encourages, but do not require, Jaguar's directors to attend Jaguar's annual meeting.

Code of Business Conduct and Ethics

Jaguar has adopted a Code of Business Conduct and Ethics that applies to its directors, officers and employees, including its President and Chief Executive Officer, its Chief Financial Officer, and other employees who perform financial or accounting functions. The Code of Business Conduct and Ethics sets forth the basic principles that guide the business conduct of Jaguar's employees. A current copy of the code is on Jaguar's website at <http://investors.jaguaranimalhealth.com/phoenix.zhtml?c=253723&p=irol-govhighlights>. Jaguar intends to disclose future amendments to certain provisions of Jaguar's Code of Business Conduct and Ethics, or waivers of such provisions on its website to the extent required by applicable rules and exchange requirements. The inclusion of Jaguar's website address in this joint proxy statement/prospectus does not incorporate by reference the information on or accessible through such website into this joint proxy statement/prospectus.

Compensation Committee Interlocks and Insider Participation

None of the members of Jaguar's compensation committee has ever been an officer or employee of Jaguar. None of Jaguar's executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee or other board committee performing equivalent functions of any entity that has one or more of its executive officers serving on Jaguar's board of directors or compensation committee.

Table of Contents

Limitation of Liability and Indemnification

Jaguar's second amended and restated certificate of incorporation and amended and restated bylaws contain provisions that limit the personal liability of its directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable to such corporation or its stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

any breach of the directors duty of loyalty to such corporation or its stockholders;

any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law, or DGCL; or

any transaction from which the director derived an improper personal benefit.

Such limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies, such as injunctive relief or rescission.

Jaguar's second amended and restated certificate of incorporation provides that Jaguar indemnify its directors to the fullest extent permitted by Delaware law. In addition, Jaguar's amended and restated bylaws provide that Jaguar indemnify its directors and officers to the fullest extent permitted by Delaware law. Jaguar's amended and restated bylaws also provide that Jaguar shall advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit Jaguar to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity, regardless of whether Jaguar would otherwise be permitted to indemnify him or her under the provisions of Delaware law. Jaguar has entered and expects to continue to enter into agreements to indemnify its directors, executive officers and other employees as determined by its board of directors. With certain exceptions, these agreements provide for indemnification for related expenses including, among others, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. Jaguar believes that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. Jaguar also maintains directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in Jaguar's second amended and restated certificate of incorporation and amended and restated bylaws and its indemnification agreements may discourage stockholders from bringing a lawsuit against its directors for breach of their fiduciary duty of care. They may also reduce the likelihood of derivative litigation against Jaguar's directors and officers, even though an action, if successful, might benefit Jaguar and other stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent that Jaguar pays the costs of settlement and damage awards against directors and officers. There is no pending litigation or proceeding involving any of Jaguar's directors, officers or employees for which indemnification is sought, and Jaguar is not aware of any threatened litigation that may result in claims for indemnification.

Board Leadership Structure

Jaguar's second amended and restated bylaws and corporate governance guidelines provide the board of directors with flexibility in its discretion to combine or separate the positions of chairperson of the board and chief executive officer. As a general policy, Jaguar's board of directors believes that separation of the positions of chairperson and chief executive officer reinforces the independence of the board of directors from management, creates an environment that encourages objective oversight of

Table of Contents

management's performance and enhances the effectiveness of the board of directors as a whole. Jaguar expects and intends the positions of chairperson of the board and chief executive officer to be held by two individuals in the future.

Risk Oversight

Jaguar's board of directors monitors its exposure to a variety of risks through Jaguar's Audit Committee. Jaguar's Audit Committee charter gives the Audit Committee responsibilities and duties that include discussing with management and the independent auditors Jaguar's major financial risk exposures and the steps management has taken to monitor and control such exposures, including Jaguar's risk assessment and risk management policies.

Nomination of Directors

There have been no material changes to the procedures by which stockholders may recommend nominees to Jaguar's Board of Directors. Recommendations to Jaguar's Board of Directors for election as directors of Jaguar at an annual meeting may be made only by the Nominating Committee or by Jaguar's stockholders (through the Nominating Committee) who comply with the timing, informational, and other requirements of Jaguar's bylaws. Stockholders have the right to recommend persons for nomination by submitting such recommendation, in written form, to the Nominating Committee, and such recommendation will be evaluated pursuant to the policies and procedures adopted by Jaguar's board. Such recommendation must be delivered to or mailed to and received by the Secretary of Jaguar at the principal executive offices not later than 120 calendar days prior to the anniversary of the date Jaguar's prior year proxy statement was first made available to stockholders, except that if no annual meeting of stockholders was held in the preceding year or if the date of the annual meeting of stockholders has been changed by more than 30 calendar days from the date contemplated at the time of the preceding year's proxy statement, the notice shall be received by the Secretary at Jaguar's principal executive offices not less than 150 calendar days prior to the date of the contemplated annual meeting or the date that is 10 calendar days after the date of the first public announcement or other notification to stockholders of the date of the contemplated annual meeting, whichever first occurs. The deadline to submit recommendations for election as directors at the 2017 Annual Meeting has already passed. Jaguar stockholders who wish to present proposals for inclusion in the proxy materials to be distributed in connection with next year's Annual Meeting proxy statement must submit their proposals so that they are received by Jaguar before December 18, 2016, which is 120 calendar days before April 17, the date on which Jaguar's prior year's proxy statement was first made available to Jaguar's stockholders. Jaguar's Board of Directors has not yet determined the date of the 2018 Annual Meeting of Jaguar's Stockholders, but does not currently anticipate that the date will be changed by more than 30 calendar days from the date of this year's annual meeting.

Jaguar's Nominating Committee, in accordance with the Jaguar board's governance principles, seeks to create a board that has the ability to contribute to the effective oversight and management of Jaguar, that is as a whole strong in its collective knowledge of and diversity of skills and experience with respect to accounting and finance, management and leadership, vision and strategy, business judgment, biotechnology industry knowledge, corporate governance and global markets. When the Nominating Committee reviews a potential new candidate, the Nominating Committee looks specifically at the candidate's qualifications in light of the needs of Jaguar's board and Jaguar at that time given the then current mix of director attributes.

General criteria for the nomination and evaluation of director candidates include:

loyalty and commitment to promoting the long term interests of Jaguar's stockholders;

the highest personal and professional ethical standards and integrity;

Table of Contents

an ability to provide wise, informed and thoughtful counsel to top management on a range of issues;

a history of achievement that reflects superior standards for themselves and others;

an ability to take tough positions in constructively-challenging Jaguar's management while at the same time working as a team player; and

individual backgrounds that provide a portfolio of personal and professional experience and knowledge commensurate with the needs of Jaguar.

The Nominating Committee must also ensure that the members of the board as a group maintain the requisite qualifications under the applicable NASDAQ Stock Market listing standards for populating the Audit, Compensation and Nominating Committees.

Written recommendations from a stockholder for a director candidate must include the following information:

the stockholder's name and address, as they appear on Jaguar's corporate books;

the class and number of shares that are beneficially owned by such stockholder;

the dates upon which the stockholder acquired such shares; and

documentary support for any claim of beneficial ownership.

Additionally, the recommendation needs to include, as to each person whom the stockholder proposes to recommend to the Nominating Committee for nomination to election or reelection as a director, all information relating to the person that is required pursuant to Regulation 14A under the Exchange Act, as amended, and evidence satisfactory to us that the nominee has no interests that would limit their ability to fulfill their duties of office.

Once Jaguar's Nominating Committee receives a recommendation, it will deliver a questionnaire to the director candidate that requests additional information about his or her independence, qualifications and other information that would assist the Nominating Committee in evaluating the individual, as well as certain information that must be disclosed about the individual in Jaguar's proxy statement, if nominated. Individuals must complete and return the questionnaire within the time frame provided to be considered for nomination by the Nominating Committee.

The Nominating Committee will review the stockholder recommendations and make recommendations to Jaguar's Board of Directors that the Committee feels are in the best interests of Jaguar and its stockholders.

The Nominating Committee has not received any recommendations from stockholders for the 2018 Annual Meeting.

Table of Contents

Communications with Jaguar's Board of Directors

Stockholders may contact an individual director or Jaguar's board as a group, or a specified board committee or group, including the non-employee directors as a group, by the following means:

Mail: Attn: Board of Directors
Jaguar Animal Health, Inc.
201 Mission Street, Suite 2375
San Francisco, CA 94105

Email: AskBoard@jaguaranimalhealth.com

Each communication should specify the applicable addressee or addressees to be contacted as well as the general topic of the communication. Jaguar will initially receive and process communications before forwarding them to the addressee. Jaguar also may refer communications to other departments within Jaguar. Jaguar generally will not forward to the directors a communication that is primarily commercial in nature, relates to an improper or irrelevant topic, or requests Jaguar's general information.

Complaint and Investigation Procedures for Accounting, Internal Accounting Controls, Fraud or Auditing Matters

Jaguar has created procedures for confidential submission of complaints or concerns relating to accounting or auditing matters and contracted with NASDAQ to facilitate the gathering, monitoring and delivering reports on any submissions. As of the date of this report, there have been no submissions of complaints or concerns to NASDAQ. Complaints or concerns about Jaguar's accounting, internal accounting controls or auditing matters may be submitted to Jaguar's Audit Committee and Jaguar's executive officers by contacting NASDAQ. NASDAQ provides phone, internet and e-mail access and is available 24 hours per day, seven days per week, 365 days per year. The hotline number is 1-844-417-8861 and the website is <https://www.openboard.info/jagx>. Any person may submit a written Accounting Complaint to jagx@openboard.info.

Jaguar's Audit Committee under the direction and oversight of the Audit Committee Chair will promptly review all submissions and determine the appropriate course of action. The Audit Committee Chair has the authority, in his discretion, to bring any submission immediately to the attention of other parties or persons, including the full Board, accountants and attorneys. The Audit Committee Chair shall determine the appropriate means of addressing the concerns or complaints and delegate that task to the appropriate member of senior management, or take such other action as it deems necessary or appropriate to address the complaint or concern, including obtaining outside counsel or other advisors to assist Jaguar's Audit Committee.

Director Compensation

Jaguar currently does not pay its directors any cash compensation for their services on Jaguar's board of directors. Jaguar intends to make annual equity grants to directors serving on its board who are not employees nor serving as designees of Jaguar's investors, along with an additional equity grant to the Chairperson of its board of directors. Jaguar may in the future determine to make additional equity grants or pay other equity compensation for service on its board of directors.

In June 2014, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 39,410 shares of common stock at an exercise price of \$4.83 per share, which expires 10 years after the grant date. The option vests as follows: 25% vests on March 2, 2015, 9 months after the grant date, with the remainder vesting equally over the next 27 months such that the option is vested in full on June 2, 2017.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

In June 2015, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 20,000 shares of common stock at an exercise price of \$6.70 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 11,293 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In September 2016, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 75,000 shares of common stock at an exercise price of \$1.25 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In December 2016, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 16,378 shares of common stock at an exercise price of \$0.74 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

Mr. Kamphuis provided consulting services through Kernel Management and Consulting AG from December 2015 through March 2016.

In June 2015, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 50,000 shares of common stock at an exercise price of \$6.70 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 9,504 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In August 2016, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 50,000 shares of common stock at an exercise price of \$1.47 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In September 2016, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 13,000 shares of common stock at an exercise price of \$1.25 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In December 2016, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 13,771 shares of common stock at an exercise price of \$0.74 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In June 2015, Jaguar granted Mr. Qui, a member of the Audit Committee, a stock option to acquire 10,000 shares of common stock at an exercise price of \$6.70 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Mr. Qui, a member of the Audit Committee, a stock option to acquire 1,901 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years

Table of Contents

after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In June 2015, Jaguar granted Dr. Yang, a member of the Audit Committee, a stock option to acquire 10,000 shares of common stock at an exercise price of \$6.70 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Dr. Yang, a member of the Audit Committee, a stock option to acquire 1,901 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Mr. Micek, a member of the Audit, Compensation and Nominating Committees, a stock option to acquire 96,824 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In December 2016, Jaguar granted Mr. Micek, a member of the Audit, Compensation and Nominating Committees, a stock option to acquire 10,884 shares of common stock at an exercise price of \$0.74 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In December 2016, Jaguar granted Dr. Azhir, a member of the Audit and Compensation Committees, a stock option to acquire 98,050 shares of common stock at an exercise price of \$0.74 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

Table of Contents

INFORMATION ABOUT THE JAGUAR SPECIAL MEETING AND VOTE

Date, Time and Place of the Special Meeting

These proxy materials are delivered in connection with the solicitation by the Jaguar Board of proxies to be voted at the Jaguar special meeting, which is to be held at 201 Mission Street, Suite 2375, San Francisco, CA 94105, at [•], a.m., local time, on [•], 2017. On or about [•], 2017 Jaguar commenced mailing this joint proxy statement/prospectus and the enclosed form of proxy to its stockholders entitled to vote at the meeting.

**IMPORTANT NOTICE REGARDING THE INTERNET AVAILABILITY
OF PROXY MATERIALS FOR THE JAGUAR 2017 SPECIAL MEETING
OF STOCKHOLDERS TO BE HELD [•], 2017**

This Joint Proxy Statement/Prospectus is available at the following website address: www.jaguaranimalhealth.com. You are encouraged to access and review all of the important information contained in the proxy materials before voting.

Purpose of the Jaguar Special Meeting

Jaguar stockholders will be asked to vote on the following proposals:

1. To approve the issuance of shares of Jaguar common stock and non-voting common stock pursuant to the Agreement and Plan of Merger, dated as of March 31, 2017, by and among Jaguar Animal Health, Inc., Napo Acquisition Corporation, Napo Pharmaceuticals, Inc., and a representative of Napo Pharmaceuticals, Inc. (sometimes referred to as the merger agreement). A copy of the merger agreement has been included as *Annex A* to this joint proxy statement/prospectus.
2. To approve the issuance of shares of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019.
3. To approve the issuance of \$3,000,000 of Jaguar common stock at a price equal to \$0.925 per share to Invesco, pursuant to the Commitment Letter.
4. To approve the amendment of the 2014 Plan to increase the number of shares of Jaguar common stock authorized for issuance under the 2014 Plan by 6,500,188 shares.
5. To approve Jaguar's Third Amended and Restated Certificate of Incorporation to (i) increase the number of authorized shares of common stock from 50 million shares to 225 million shares, (ii) authorize a class of non-voting common stock, (iii) require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and (iv) change the Jaguar corporate name to "Jaguar Health, Inc." A copy of Jaguar's Third Amended and Restated Certificate of Incorporation has been included as *Annex B* to this joint proxy statement/prospectus.
6. To adjourn the special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to approve (i) the issuances of shares described in Proposals 1 through 3, (ii) the amendment of the 2014 Plan described in Proposal 4, and/or (iii) the adoption of Jaguar's proposed Third Amended and Restated Certificate of Incorporation described in Proposal 5.
7. To transact such other business as may properly come before the special meeting or any adjournment or postponement thereof.

Table of Contents

It is a condition to completion of the merger that holders of Jaguar common stock approve Proposals 1, 4 and 5, voting together as a single class.

At the effective time of the merger, (i) each issued and outstanding share of Napo common stock (other than dissenting shares and shares held by Jaguar or Napo) will be converted into a contingent right to receive (x) up to a whole number of shares of Jaguar common stock comprising in the aggregate up to approximately 21.5% of the fully diluted shares of Jaguar common stock immediately following the consummation of the merger, which contingent right will vest only if the resale of the Tranche A Shares to third parties provides Nantucket with sufficient cash proceeds to meet the applicable Hurdle Amount and (y) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, additional shares of the Jaguar common stock (equal to 50% of the unsold Tranche A shares), which will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units, (ii) existing creditors of Napo will receive an aggregate of not more than 2,005,245 shares of Jaguar common stock and not more than 43,156,649 shares of Jaguar non-voting common stock in full satisfaction of all existing indebtedness then owed by Napo to such creditors, and (iii) an existing Napo stockholder will be issued an aggregate of approximately 3,243,243 shares of Jaguar common stock in return for \$3 million of new funds invested into Jaguar by such investor.

Shares of Jaguar non-voting common stock are the same in all respects to shares of Jaguar's common stock, except that holders of shares of non-voting common stock are not entitled to vote on matters submitted to Jaguar stockholders other than a change of control of Jaguar, and shares of non-voting common stock are convertible into shares of common stock on a one-for-one basis (i) at the option of the respective holders thereof, at any time and from time to time on or after April 1, 2018 or (ii) automatically, without any payment of additional consideration by the holder thereof, (x) upon a transfer of such shares to any person or entity that is neither an affiliate of Nantucket nor an investment fund, investment vehicle or other account, that is, directly or indirectly, managed or advised by Nantucket or any of its affiliates pursuant to a sale of such stock to a third-party for cash in accordance with the terms and condition set forth in the Investor Rights Agreement, or (y) upon the release or transfer of such shares to the Napo Legacy Stockholders.

Jaguar will assume (i) each outstanding and unexercised option to purchase Napo common stock, which will be converted into options to purchase Jaguar common stock, (ii) each outstanding warrant to purchase Napo common stock, which will be converted into warrants to purchase Jaguar common stock, and (iii) each outstanding restricted stock unit to acquire Napo common stock, which will be converted into restricted stock units to acquire Jaguar common stock.

The stockholders of Jaguar will continue to own their existing shares and the rights and privileges of their existing shares will not be affected by the merger. However, because Jaguar will be issuing new shares of Jaguar common stock and non-voting common stock to Napo creditors, contingent rights to receive Jaguar common stock to Napo stockholders, and options, warrants and restricted stock units exercisable for Jaguar common stock to holders of Napo options, warrants and restricted stock units in the merger, the stockholders of Jaguar will experience dilution as a result of the issuance of shares in the merger and each outstanding share of Jaguar common stock immediately prior to the merger will represent a smaller percentage of the total number of shares of Jaguar common stock and non-voting common stock issued and outstanding after the merger. It is expected that Jaguar stockholders before the merger will hold approximately 25% of the total Jaguar common stock and non-voting common stock issued and outstanding immediately following completion of the merger. Thus, Jaguar stockholders before the merger will experience dilution in the amount of approximately 75% as a result of the merger.

Under NASDAQ Marketplace Rule 5635(a), a company listed on The NASDAQ Capital Market is required to obtain stockholder approval in connection with a merger with another company if the number of shares of common stock or securities convertible into common stock to be issued is in excess

Table of Contents

of 20% of the number of shares of common stock then outstanding. Based upon the current number of issued and outstanding shares of Jaguar common stock, if the merger is completed, it is estimated that an aggregate of approximately 69,299,346 shares of Jaguar common stock will be issued upon the closing of the merger to the Napo Stakeholders, assuming the exercise or conversion of all outstanding options and warrants other than those options and warrants exercisable or convertible for approximately 300,000 shares of Jaguar common stock with an exercise/conversion price of \$5.00 or more. The aggregate number of shares of Jaguar common stock and non-voting common stock to be issued in connection with the merger and related Napo debt settlement will exceed 20% of the shares of Jaguar common stock issued and outstanding on the record date for the Jaguar special meeting. For these reasons Jaguar must obtain the approval of Jaguar stockholders for the issuance of these securities to the Napo Stakeholders in connection with the merger, the debt settlements and new financings described herein.

Record Date and Voting Power

Only stockholders of record as of the close of business on [•], 2017 will be entitled to notice of and to vote at the special meeting or at any subsequent meeting due to an adjournment of the original meeting.

On the record date, Jaguar had two classes of voting stock, common stock and preferred stock, of which [•] shares of common stock were issued and outstanding and zero shares of preferred stock were issued and outstanding. Each outstanding share of common stock entitles the holder to one vote on all matters to be voted upon at the special meeting.

A complete list of stockholders entitled to vote at the Jaguar special meeting will be available for examination by any Jaguar stockholder at Jaguar's headquarters, 201 Mission Street, Suite 2375, San Francisco, CA 94105, for purposes pertaining to the Jaguar special meeting, during normal business hours for a period of ten days before the Jaguar special meeting, and at the time and place of the Jaguar special meeting.

Quorum and Voting Rights

A quorum is the number of shares that must be represented at a meeting to lawfully conduct business. The presence, in person or by proxy, of holders of a majority of the Jaguar common stock issued and outstanding and entitled to vote at the special meeting constitutes a quorum for the transaction of business. Proxies received but marked as abstentions, if any, and broker non-votes, if any, will be included in the calculation of the number of shares considered to be present at the Jaguar special meeting for purposes of determining a quorum. As of the record date, a total of [•] shares of common stock were outstanding and eligible to vote at the Jaguar special meeting.

Required Vote

To approve the issuance of shares of Jaguar common stock and non-voting common stock in the transactions contemplated by the merger agreement (Proposal 1), the issuance of shares of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019 (Proposal 2) and the issuance of \$3,000,000 of Jaguar common stock at a price equal to \$0.925 per share to Invesco, pursuant to the Invesco Commitment Letter (Proposal 3), the affirmative vote of the holders of a majority of shares of Jaguar common stock cast affirmatively or negatively (excluding abstentions and broker non-votes), present in person or by remote communication, if applicable, or represented by proxy, voting together as a single class and entitled to vote, is required. Although failure to submit a proxy or vote in person at the special meeting, or a failure to provide your broker, nominee, fiduciary or other custodian, as applicable, with instructions on how to vote your shares will not affect the outcome of the vote on the proposal to approve the issuance of shares of Jaguar

Table of Contents

common stock and non-voting common stock, the failure to submit a proxy or vote in person at the special meeting will make it more difficult to meet the requirement under Jaguar's bylaws that the holders of a majority of the Jaguar capital stock issued and outstanding and entitled to vote at the special meeting be present in person or by remote communication or represented by proxy to constitute a quorum at the special meeting.

To approve the amendment of the 2014 Plan (Proposal 4), the affirmative vote of a majority of the outstanding shares of Jaguar common stock, voting together as a single class and entitled to vote, is required for such proposal. Because approval is based on the affirmative vote of a majority of the outstanding shares of Jaguar common stock entitled to vote, a Jaguar stockholder's failure to vote in person or by proxy at the special meeting, or an abstention from voting, or the failure of a holder of Jaguar common stock who holds his or her shares in "street name" through a broker or other nominee to give voting instructions to such broker or other nominee, will have the same effect as a vote "**AGAINST**" adoption of this proposal.

To approve the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 50 million shares to 225 million shares, authorize a class of non-voting common stock, require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and change the Jaguar corporate name to "Jaguar Health, Inc." (Proposal 5), the affirmative vote of a majority of the outstanding shares of Jaguar common stock, voting together as a single class and entitled to vote, is required for such proposal. Because approval is based on the affirmative vote of a majority of the outstanding shares of Jaguar common stock entitled to vote, a Jaguar stockholder's failure to vote in person or by proxy at the special meeting, or an abstention from voting, or the failure of a holder of Jaguar common stock who holds his or her shares in "street name" through a broker or other nominee to give voting instructions to such broker or other nominee, will have the same effect as a vote "**AGAINST**" adoption of this proposal.

To approve the adjournment of the special meeting, if necessary or advisable to solicit additional proxies if there are not sufficient votes to adopt the merger agreement at the time of the special meeting (Proposal 6), the affirmative vote of the holders of a majority of shares of Jaguar common stock voting together as a single class, entitled to vote thereon, if a quorum is present, is required. The chairman of the meeting may also (regardless of the outcome of the stockholder vote on adjournment) adjourn the meeting to another place, date and time. If a quorum is not present, a majority of the voting stock present in person, or by remote communication, if applicable, or represented by proxy, or the chairman of the meeting, may adjourn the meeting until a quorum is present. Shares held by stockholders who are not present at the special meeting in person or by remote communication or not represented by proxy will have no effect on the outcome of any vote to adjourn the special meeting. Broker non-votes and abstentions will have no effect on the outcome of any vote to adjourn the special meeting if a quorum is present but will have the same effect as a vote "**AGAINST**" if no quorum is present.

Broker Non-Votes

If you are a beneficial owner of shares held in street name and do not provide the organization that holds your shares with specific voting instructions, under the rules of various national and regional securities exchanges, the organization that holds your shares may generally vote on routine matters but cannot vote on non-routine matters. If the organization that holds your shares does not receive instructions from you on how to vote your shares on a non-routine matter, the organization that holds your shares does not have the authority to vote on the matter with respect to those shares. This is generally referred to as a "broker non-vote." Broker non-votes, if any, will be counted as being present at the special meeting for purposes of determining a quorum, but will not be voted on those matters

Table of Contents

for which specific authorization is required. Under the current rules of The NASDAQ Stock Market, brokers do not have discretionary authority to vote on any of Jaguar's proposals. Therefore, if you do not provide voting instruction to your broker, your shares will not be voted on the proposal to approve any of Jaguar's proposals. A broker non-vote will have no effect on the outcome of the proposals to issue the Jaguar common stock and non-voting common stock in the transactions contemplated by the merger agreement. A broker non-vote will have the same effect as a vote "AGAINST" the amendment of the 2014 Plan and the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation. A broker non-vote will have no effect on the outcome of any vote on the proposal to adjourn the special meeting if a quorum is present but will have the same effect as a vote "AGAINST" if no quorum is present.

Abstentions; Non-Voting

For the proposals to approve the issuance of shares of Jaguar common stock and non-voting common stock as contemplated by the merger agreement, an abstention or a failure to submit a proxy will not affect the outcome of the vote for the proposal, but it will make it more difficult to meet the requirement under Jaguar's bylaws that the holders of a majority of the Jaguar capital stock issued and outstanding and entitled to vote at the special meeting be present in person or by proxy to constitute a quorum at the special meeting.

For the proposal to approve the amendment of the 2014 Plan, an abstention or failure to submit a proxy will have the same effect as a vote "AGAINST" such proposal.

For the proposal to approve the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation as contemplated by the merger agreement, an abstention or failure to submit a proxy will have the same effect as a vote "AGAINST" such proposal.

For the proposal to adjourn the Jaguar special meeting, if necessary or advisable, an abstention or a failure to submit a proxy will not affect the outcome of the vote for the proposal if a quorum is present but will have the same effect as a vote cast "AGAINST" such proposal if no quorum is present.

Appraisal Rights; Trading of Shares

Under Delaware law, Jaguar stockholders are not entitled to appraisal rights in connection with the issuance of shares of Jaguar common stock and non-voting common stock as contemplated by the merger agreement. It is anticipated that shares of Jaguar common stock will continue to be traded on The NASDAQ Capital Market during the pendency of and following the effectiveness of the merger. Shares of Jaguar non-voting common stock will not trade on any stock exchange. Jaguar's corporate status will not change because the merger is being consummated between one of its subsidiaries and Napo.

Shares Beneficially Owned by Jaguar Directors and Executive Officers

Jaguar's directors and executive officers beneficially owned [•] shares of Jaguar common stock on [•], 2017, the record date for the special meeting. These shares represent in total [•]% of the total voting power of Jaguar's voting securities outstanding and entitled to vote as of the record date. Jaguar currently expects that Jaguar's directors and executive officers will vote their shares "FOR" all the proposals to be voted on at the special meeting, although none of them has entered into any agreements obligating them to do so.

Table of Contents

Voting of Shares; Proxies

Stockholders of record may vote in person by ballot at the special meeting or by submitting their proxies:

by telephone, by calling the toll-free number [•] and following the recorded instructions;

by accessing the Internet website [www.proxyvote.com] and following the instructions on the website; or

by mail, by indicating your vote on each proxy card you receive, signing and dating each proxy card returning each proxy card in the prepaid envelope that accompanied that proxy card.

The internet and telephone proxy submission procedures are designed to authenticate stockholders and to allow them to confirm that their instructions have been properly recorded.

Stockholders of Jaguar who hold their shares in "street name" by a broker, nominee, fiduciary or other custodian should refer to the proxy card or other information forwarded by their broker, nominee, fiduciary or other custodian for instructions on how to vote their shares.

Only proxy cards and voting instruction forms that have been signed, dated and timely returned, and only shares that have been timely voted electronically or by telephone will be counted in the quorum and voted. *The Internet and telephone voting facilities will close at 11:59 p.m. Eastern Time, [•], [•], 2017.*

Stockholders who vote over the Internet or by telephone need not return a proxy card or voting instruction form by mail, but may incur costs, such as usage charges, from telephone companies or Internet service providers.

Jaguar recommends you submit your proxy even if you plan to attend the special meeting. If you properly give your proxy and submit it to Jaguar in time to vote, one of the individuals named as your proxy will vote your shares as you have directed. If you attend the special meeting, you may vote by ballot, thereby cancelling any proxy previously submitted. If you hold your shares in "street name," you will have to obtain a legal proxy in your name from the broker, nominee, fiduciary or other custodian who holds your shares in order to vote in person at the special meeting. You may vote for or against the proposals or abstain from voting.

All votes will be tabulated by the inspector of elections appointed for the special meeting, who will separately tabulate affirmative and negative votes, abstentions and broker non-votes.

If you are a stockholder of record and submit your proxy but do not make specific choices, your proxy will follow the Jaguar Board's recommendations and your shares will be voted:

"FOR" the proposal to approve the issuance of shares of Jaguar common stock and non-voting common stock as contemplated by the merger agreement.

"FOR" the proposal to approve the issuance of shares of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019.

"FOR" the proposal to approve the issuance of \$3,000,000 of Jaguar common stock at a price equal to \$0.925 per share to Invesco pursuant to the Invesco Commitment Letter.

"FOR" the proposal to amend the 2014 Plan.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

"FOR" the proposal to adopt Jaguar's Third Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 50 million shares to 225 million shares, authorize a class of non-voting common stock, require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and change the Jaguar corporate name to "Jaguar Health, Inc."

"FOR" the proposal to adjourn the special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to approve the above matters.

Table of Contents

Revocability of Proxies and Changes to a Jaguar Stockholder's Vote

A Jaguar stockholder has the power to change its vote at any time before its shares are voted at the special meeting by:

notifying Jaguar's Corporate Secretary, Steven R. King, in writing at 201 Mission Street, Suite 2375, San Francisco, CA 94105, prior to the Jaguar special meeting that you are revoking your proxy;

executing and delivering a later dated proxy card or submitting a later dated vote by telephone or on the Internet; or

by attending the Jaguar special meeting and voting your shares in person.

However, if your shares held in "street name" through a brokerage firm, bank, nominee, fiduciary or other custodian, you must check with your brokerage firm, bank, nominee, fiduciary or other custodian to determine how to revoke your proxy.

Solicitation of Proxies

The solicitation of proxies from Jaguar stockholders is made on behalf of the Jaguar Board. Jaguar will be responsible for all fees paid to the Securities and Exchange Commission and the costs of soliciting Jaguar stockholders and obtaining these proxies, including the cost of reimbursing brokers, banks and other financial institutions for forwarding proxy materials to their customers. Proxies may be solicited, without extra compensation, by Jaguar officers and employees by mail, telephone, fax, personal interviews or other methods of communication. Jaguar has engaged the firm of [•] to assist Jaguar in the distribution and solicitation of proxies from Jaguar stockholders and will pay [•] an estimated fee of \$[•] plus out-of-pocket expenses for its services. Napo will pay the costs of soliciting and obtaining its proxies and all other expenses related to the Napo special meeting.

Other Business; Adjournments

Jaguar is not currently aware of any other business to be acted upon at the Jaguar special meeting. If, however, other matters are properly brought before the special meeting, your proxies include discretionary authority on the part of the individuals appointed to vote your shares to act on those matters according to their best judgment.

Any adjournment may be made from time to time by the affirmative vote of the holders of a majority of the shares represented at the Jaguar special meeting in person or by proxy and entitled to vote thereat and, whether or not a quorum is present, without further notice other than by announcement at the meeting.

If the special meeting is adjourned to a different place, date or time, Jaguar need not give notice of the new place, date or time if the new place, date or time is announced at the meeting before adjournment, unless a new record date is set for the meeting. The Jaguar Board may fix a new record date if the meeting is adjourned. Proxies submitted by Jaguar stockholders for use at the special meeting will be used at any adjournment or postponement of the meeting. Unless the context otherwise requires, references to the Jaguar special meeting in this joint proxy statement/prospectus are to such special meeting as adjourned or postponed.

Attending the Meeting

Subject to space availability, all stockholders as of the record date, or their duly appointed proxies, may attend the meeting. Since seating is limited, admission to the meeting will be on a first-come, first-served basis. Registration and seating will begin at [•] a.m., local time.

Table of Contents

Jaguar Proposal 1: Approval of the Issuance of Shares of Jaguar Common Stock and Non-Voting Common Stock in the Transactions Contemplated by the Merger Agreement

At the Jaguar special meeting, holders of Jaguar common stock will be asked to approve the issuance of shares of Jaguar common stock and non-voting common stock in connection with the transactions contemplated by the merger agreement. Holders of Jaguar common stock should read this joint proxy statement/prospectus carefully and in its entirety, including the annexes, for more detailed information concerning the merger agreement and merger. A copy of the merger agreement is attached to this joint proxy statement/prospectus as *Annex A*.

Based upon the current number of issued and outstanding shares of Napo common stock, if the merger is completed, it is estimated that approximately 69,299,346 shares of Jaguar common stock will be issued upon the closing of the merger and related Napo refinancing, on a fully diluted basis assuming the exercise or conversion of all outstanding options and warrants other than those options and warrants exercisable or convertible for approximately 300,000 shares of Jaguar common stock with an exercise/conversion price of \$5.00 or more. On an as converted basis, assuming the resale of the Tranche A shares to third parties provides Nantucket with sufficient proceeds to satisfy the Hurdle Amounts, the aggregate number of shares of Jaguar common stock and non-voting common stock to be issued and issuable in connection with the transactions contemplated in the merger agreement, and related Napo refinancing will exceed 20% of the shares of Jaguar common stock issued and outstanding on the record date for the Jaguar special meeting. For these reasons Jaguar must obtain the approval of Jaguar stockholders for the issuance of shares of Jaguar common stock and non-voting stock to Napo creditors and stockholders in the transactions contemplated by the merger agreement.

Required Vote of Stockholders

To approve the issuance of shares of Jaguar common stock and non-voting common stock in the transactions contemplated by the merger agreement (this Proposal 1), the affirmative vote of the holders of a majority of shares of Jaguar common stock, present in person or by remote communication, if applicable, or represented by proxy at the special meeting, voting together as a single class and entitled to vote, is required. Although failure to submit a proxy or vote in person at the special meeting, or a failure to provide your broker, nominee, fiduciary or other custodian, as applicable, with instructions on how to vote your shares will not affect the outcome of the vote on this proposal, the failure to submit a proxy or vote in person at the special meeting will make it more difficult to meet the requirement under Jaguar's bylaws that the holders of a majority of the Jaguar capital stock issued and outstanding and entitled to vote at the special meeting be present in person or by proxy to constitute a quorum at the special meeting.

Recommendation of the Jaguar Board

THE JAGUAR BOARD UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE APPROVAL OF THE ISSUANCE OF SHARES OF JAGUAR COMMON STOCK AND NON-VOTING COMMON STOCK IN CONNECTION WITH THE TRANSACTIONS CONTEMPLATED BY THE MERGER AGREEMENT.

THE MERGER IS CONDITIONED ON APPROVAL OF THIS PROPOSAL.

Jaguar Proposal 2: Approval of the Issuance of Shares of Jaguar Common Stock upon Conversion of the Convertible Promissory Notes

At the Jaguar special meeting, holders of Jaguar common stock will be asked to approve the issuance of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019, issued or issuable by Napo to certain investors in the original principal amount of up to \$12,500,000, as amended on March 31, 2017. Holders of Jaguar common stock should read this

Table of Contents

joint proxy statement/prospectus carefully and in its entirety, including the annexes, for more detailed information concerning the merger agreement and merger.

Background of the Convertible Promissory Notes

On March 31, 2017, Napo entered into an Amended and Restated Note Purchase Agreement (sometimes referred to herein as the Kingdon NPA) with Kingdon Associates, M. Kingdon Offshore Master Fund L.P., Kingdon Family Partnership, L.P., and Kingdon Credit Master Fund L.P. (and, together with any other party purchasing Kingdon Notes (as defined below) pursuant to the Kingdon NPA, sometimes collectively referred to herein as the Kingdon Purchasers), under which remains outstanding \$2,500,000 in aggregate principal amount of convertible promissory notes (sometimes referred to herein as the Kingdon Notes) issued by Napo on December 30, 2016 to such purchasers at a purchase price of \$2,000,000. Subject to the consummation of the merger, the holders of the Kingdon Notes may convert the Kingdon Notes into shares of Jaguar common stock at a conversion price of \$0.925 (i) from the date of the Kingdon Note until the day immediately preceding the one-year anniversary of the Kingdon Note, all, but not less than all, of one-third of the outstanding principal and interest of the Kingdon Note, (ii) from the one-year anniversary of the Kingdon Note until the day immediately preceding the two-year anniversary of the Kingdon Note, all, but not less than all, of an additional one-third of the outstanding principal and interest of the Kingdon Note, and (iii) from the two-year anniversary of the Kingdon Note and thereafter, all, but not less than all, of the outstanding principal and interest of the Kingdon Note. Subject to the satisfaction of certain conditions, each purchaser is required to purchase its pro rata portion of additional Kingdon Notes with an aggregate original principal amount of \$7,500,000 for an aggregate purchase price of \$6,000,000, which subsequent purchase will occur simultaneously with the consummation of the merger and with effect as of immediately prior to the consummation of the merger.

Pursuant to the Kingdon NPA, Jaguar must issue 10,810,811 shares of Jaguar common stock to the holders of the Kingdon Notes upon conversion of the \$10,000,000 aggregate principal amount of Kingdon Notes.

Required Vote of Stockholders

To approve the issuance of shares of Jaguar common stock upon conversion of the Kingdon Notes (this Proposal 2), the affirmative vote of the holders of a majority of shares of Jaguar common stock, present in person or by remote communication, if applicable, or represented by proxy at the special meeting, voting together as a single class and entitled to vote, is required. Although failure to submit a proxy or vote in person at the special meeting, or a failure to provide your broker, nominee, fiduciary or other custodian, as applicable, with instructions on how to vote your shares will not affect the outcome of the vote on this proposal, the failure to submit a proxy or vote in person at the special meeting will make it more difficult to meet the requirement under Jaguar's bylaws that the holders of a majority of the Jaguar capital stock issued and outstanding and entitled to vote at the special meeting be present in person or by proxy to constitute a quorum at the special meeting.

Recommendation of the Jaguar Board

THE JAGUAR BOARD UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE APPROVAL OF THE ISSUANCE OF SHARES OF JAGUAR COMMON STOCK COMMON STOCK UPON CONVERSION OF THE KINGDON NOTES.

Jaguar Proposal 3: Approval of the Issuance of Shares of Jaguar Common Stock to Invesco

At the Jaguar special meeting, holders of Jaguar common stock will be asked to approve the issuance of \$3,000,000 of Jaguar common stock at a price equal to \$0.925 per share to Invesco,

Table of Contents

pursuant to the Commitment Letter, dated February 21, 2017, between Jaguar and Invesco (sometimes referred to herein as the Invesco Commitment Letter). Holders of Jaguar common stock should read this joint proxy statement/prospectus carefully and in its entirety, including the annexes, for more detailed information concerning the merger agreement and merger.

Background of the Stock Issuance to Invesco

Prior to Jaguar's entry into the merger agreement, Invesco, an existing Napo stockholder, delivered the signed Invesco Commitment Letter to Jaguar, pursuant to which Invesco agreed, subject to the terms and conditions of such agreement, to purchase, simultaneously with the consummation of the merger, \$3.0 million of Jaguar common stock at a price equal to \$0.925 per share. Jaguar will loan Napo the \$3.0 million in proceeds to partially facilitate the extinguishment of the debt that Napo owes to Nantucket.

Required Vote of Stockholders

To approve the issuance of Jaguar common stock to Invesco (this Proposal 3), the affirmative vote of the holders of a majority of shares of Jaguar common stock, present in person or by remote communication, if applicable, or represented by proxy at the special meeting, voting together as a single class and entitled to vote, is required. Although failure to submit a proxy or vote in person at the special meeting, or a failure to provide your broker, nominee, fiduciary or other custodian, as applicable, with instructions on how to vote your shares will not affect the outcome of the vote on this proposal, the failure to submit a proxy or vote in person at the special meeting will make it more difficult to meet the requirement under Jaguar's bylaws that the holders of a majority of the Jaguar capital stock issued and outstanding and entitled to vote at the special meeting be present in person or by proxy to constitute a quorum at the special meeting.

Recommendation of the Jaguar Board

THE JAGUAR BOARD UNANIMOUSLY RECOMMENDS A VOTE "**FOR**" THE APPROVAL OF THE ISSUANCE OF SHARES OF JAGUAR COMMON STOCK COMMON STOCK TO INVESCO PURSUANT TO THE INVESCO COMMITMENT LETTER.

Jaguar Proposal 4: Approval of the Amended 2014 Stock Incentive Plan

On March 28, 2017, the Jaguar Board of Directors unanimously approved the amendment of the 2014 Plan, subject to approval by the stockholders to increase the number of shares of common stock authorized for issuance under the 2014 Plan by 6,500,188 shares.

The Jaguar Board of Directors has directed that the proposal to amend the 2014 Plan be submitted to the stockholders for their approval at Jaguar's annual meeting. Under the merger agreement, Jaguar will assume (i) each outstanding and unexercised option to purchase Napo common stock, which will be converted into options to purchase Jaguar common stock, (ii) each outstanding warrant to purchase Napo common stock, which will be converted into warrants to purchase Jaguar common stock, and (iii) each outstanding restricted stock unit ("RSU") to acquire Napo common stock, which will be converted into RSUs to acquire Jaguar common stock. Currently, Jaguar does not have a sufficient number of shares authorized for issuance under the 2014 Plan to cover the conversion of these Napo securities. Therefore, Jaguar must amend the 2014 Plan to authorize the issuance of additional shares so that Jaguar can meet its obligations to holders of the Napo options, warrants and RSUs under the merger agreement.

In addition, the Jaguar Board of Directors believes that Jaguar's interests and the interests of Jaguar stockholders will be advanced if Jaguar can continue to offer Jaguar's employees, notably at the senior management level, advisors, consultants, and non-employee directors the opportunity to acquire

Table of Contents

or increase their proprietary interests in Jaguar. The Jaguar Board of Directors has concluded that Jaguar's ability to attract, retain and motivate top quality management and employees is material to Jaguar's success and would be enhanced by Jaguar's continued ability to grant equity compensation under the 2014 Plan. Accordingly, the Jaguar Board of Directors has determined that the number of shares available for issuance under the 2014 Plan should be increased so that Jaguar may continue its compensation structure and strategy and succession planning process.

When adopted, a total of 333,333 shares of common stock were allocated to the 2014 Plan. Since its adoption, additional shares of common stock have been allocated to the 2014 Plan. Effective January 1, 2016, 162,498 shares were added to the 2014 Plan share pool under the 2014 Plan's automatic annual share pool increase. On April 1, 2016, Jaguar's board of directors approved, subject to shareholder approval, an amendment to the 2014 Plan that increased the number of shares available for issuance under the 2014 Plan by 1,550,000 shares. Jaguar's shareholders approved this increase in the number of shares on June 14, 2016. On January 1, 2017, 280,142 shares were added to the 2014 Plan share pool under the automatic annual share pool increase. The automatic annual share pool increase is equal to 2% of the total number of shares of common stock outstanding on December 31 of the preceding calendar year.

Under the 2014 Plan, stock awards are outstanding for a total of 1,963,273 shares that have been granted to 33 employees and directors. Thus, the total number of shares currently available for issuance under the 2014 Plan as of March 31, 2017 is 362,700 shares, not including the 6,500,188 share increase that is the subject of this Proposal 4. If stockholders approve this Proposal 4, the total number of shares available for future stock awards under the 2014 Plan will be 6,862,888. Of the total number of shares allocated to the 2014 Plan, including the 6,500,188 share increase that is the subject of this Proposal 4, the maximum aggregate number of shares that may be issued pursuant to the exercise of incentive stock options within the meaning of Section 422(b) of the Internal Revenue Code of 1986, as amended, or the Code, shall not exceed 8,826,161 shares. Based on current forecasts and estimated stock award grant rates, if the increase is not approved, it is anticipated that the 2014 Plan could run out of available shares as soon as August 31, 2017.

Stockholder approval of the amendment of the 2014 Plan is being sought (i) so that compensation attributable to grants under the 2014 Plan may continue to qualify for an exemption from the \$1 million deduction limit under section 162(m) of the Code, (ii) in order for incentive stock options to meet the requirements of the Code, and (iii) in order to meet the Nasdaq Global Market listing requirements. If the stockholders do not approve the amendment and restatement of the 2014 Plan at the Annual Meeting, the amendment of the 2014 Plan will not become effective, and the number of shares authorized for issuance under the 2014 Plan will not be increased by 6,500,188 shares.

For information with respect to grants to certain executive officers in Fiscal Year 2016 under the 2014 Plan, see page 205 and for information with respect to grants to Jaguar's non-employee directors, see page 208.

The material terms of the proposed amendment of the 2014 Plan are summarized below. This summary of the 2014 Plan is not intended to be a complete description of the 2014 Plan. This summary is qualified in its entirety by the actual text of the 2014 Plan to which reference is made. A copy of the 2014 Plan is attached as Exhibit 10.1 to Jaguar's Current Report on Form 8-K (No. 001-36714) filed with the Securities and Exchange Commission on June 20, 2016.

Material Terms of the 2014 Plan

In July 2014, our Board of Directors adopted the 2014 Plan, and in July 2014, our stockholders approved the 2014 Plan. The 2014 Plan became effective in May 2015. The 2014 Plan provides for the grant of incentive stock options to our eligible employees, and for the grant of nonstatutory stock options, restricted stock, and RSUs to eligible employees, directors and consultants.

Table of Contents

Authorized Shares. We originally approved 333,333 shares of our common stock for issuance pursuant to the 2014 Plan. On April 1, 2016, we unanimously approved the amendment of the 2014 Plan, subject to approval by the stockholders, to increase the number of shares of our common stock authorized for issuance under the 2014 Plan by 1,550,000 shares from 333,333 to 1,883,333.

On January 1st of each year, for a period of not more than five years, beginning on January 1, 2016 and ending no later than January 1, 2019, the number of shares allocated to the 2014 Plan automatically increases in an amount equal to 2% of the total number of shares of common stock outstanding on December 31st of the preceding calendar year. The Board of Directors may act prior to January 1st of any given year, at its discretion, to provide for no increase in shares or to add a lesser number of shares than provided for in the prior sentence. On January 1, 2016, a total of 162,498 shares were added to the 2014 Plan share pool under the automatic annual share pool increase. On January 1, 2017, a total of 280,142 shares were added to the 2014 Plan share pool under the automatic annual share pool increase.

If a stock award expires without having been exercised in full, or, with respect to restricted stock and RSUs, a stock award is forfeited, the shares that were subject to those stock awards will become available for future grant or sale under the 2014 Plan (unless the 2014 Plan has terminated). If unvested shares of restricted stock or RSUs are repurchased by the company or are forfeited to the company, such shares will become available for future awards under the 2014 Plan.

Plan Administration. The 2014 Plan is administered by the compensation committee of our board of directors, or the committee, or our Board of Directors, acting as the committee. In the case of awards intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code, the committee will consist of two or more "outside directors" within the meaning of Section 162(m) of the Code. In addition, if we determine it is desirable to qualify transactions under the 2014 Plan as exempt under Rule 16b-3, such transactions will be structured to satisfy the requirements for exemption under Rule 16b-3. Subject to the provisions of the 2014 Plan, the committee has the power to administer the 2014 Plan, including but not limited to, the power to interpret the terms of the 2014 Plan and stock awards granted under it, to create, amend and revoke rules relating to the 2014 Plan, including creating sub-plans, and to determine the terms of the awards, including the exercise price, the number of shares subject to each such award, the exercisability of the awards and the form of consideration, if any, payable upon exercise. The 2014 Plan limits the aggregate amount of stock awards granted under the 2014 Plan to 233,333 shares to any one participant in a fiscal year (300,000 in the first year of employment).

Options. Both incentive stock options qualifying under Section 422 of the Code and non-statutory stock options may be granted under the 2014 Plan. Of the total number of shares allocated to the 2014 Plan, the maximum aggregate number of shares that may be issued pursuant to the exercise of incentive stock options shall not exceed 2,325,973 shares. The exercise price of options granted under the 2014 Plan must at least be equal to the fair market value of the common stock on the date of grant. The term of an incentive stock option may not exceed ten years, except that with respect to any participant who owns more than 10% of the voting power of all classes of our outstanding stock, the term must not exceed five years and the exercise price must equal at least 110% of the fair market value on the grant date. For nonstatutory stock options the exercise price must equal at least 100% of the fair market value. The committee will determine the methods of payment of the exercise price of an option, which may include cash, shares or other property acceptable to the committee, as well as other types of consideration permitted by applicable law. After the termination of service of an employee, director or consultant, he or she may exercise the vested portion of his or her option for the period of time stated in his or her award agreement, except in the case of an employee terminated for cause (as defined in the 2014 Plan) the option will terminate upon his or her termination from service. Generally, if termination is due to death or disability, the vested portion of the option will remain exercisable for 12 months. In all other cases, the vested portion of the option generally will remain

Table of Contents

exercisable for three months following the termination of service. An option may not be exercised after expiration of its term. However, if the exercise of an option is prevented by applicable law the exercise period may be extended under certain circumstances. Subject to the provisions of the 2014 Plan, the committee determines the other terms of options.

Restricted Stock. Restricted stock awards may be granted under the 2014 Plan. Restricted stock awards are grants of shares of our common stock that vest in accordance with terms and conditions established by the committee. The committee will determine the number of shares of restricted stock granted to any employee, director or consultant and, subject to the provisions of the 2014 Plan, will determine the terms and conditions of such awards. The committee may impose whatever conditions to vesting it determines to be appropriate (for example, the committee may set restrictions based on the achievement of specific performance goals or continued service to us); provided, however, that the committee, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Recipients of restricted stock awards generally will have voting and dividend rights with respect to such shares upon grant without regard to vesting, unless the committee provides otherwise. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

RSUs. Awards of RSUs may be granted under the 2014 Plan. An RSU is the right to receive a share of common stock at a future date. The committee determines the terms and conditions of RSUs, including the vesting criteria (which may include accomplishing specified performance criteria or continued service to us) and the form and timing of payment. Notwithstanding the foregoing, the committee, in its sole discretion, may accelerate the time at which RSUs will vest.

Non-Transferability of Awards. Unless the committee provides otherwise, stock awards issued under the 2014 Plan are not transferrable other than by will or the laws of descent and distribution, and only the recipient of an award may exercise an award during his or her lifetime, although a recipient may designate a beneficiary to exercise an award after death.

Certain Adjustments. In the event of certain changes in the capitalization, to prevent diminution or enlargement of the benefits or potential benefits available under the 2014 Plan, the committee will adjust the number and class of shares that may be delivered under the 2014 Plan and/or the number, class and price of shares covered by each outstanding award, and the numerical share limits set forth in the 2014 Plan. In the event of the proposed liquidation or dissolution, the committee will notify participants as soon as practicable and all awards will terminate immediately prior to the consummation of such proposed transaction.

Merger or Change in Control. The 2014 Plan provides that in the event of a merger or change in control, as defined under the 2014 Plan, each outstanding award will be treated as the committee determines, including (i) the assumption, continuation or substitution of the stock awards by the successor corporation or its parent or subsidiary, (ii) the acceleration of vesting for any unvested portion of the stock awards, or (iii) the cash-out of the stock awards.

Amendment; Termination. The Board of Directors has the authority to amend, suspend or terminate the 2014 Plan provided such action does not impair the existing rights of any participant.

Required Vote of Stockholders

To approve the amendment of the 2014 Plan (this Proposal 4), the affirmative vote of the holders of a majority of shares of Jaguar common stock, present in person or by remote communication, if applicable, or represented by proxy at the annual meeting, voting together as a single class and entitled to vote, is required. Because approval is based on the affirmative vote of a majority of the outstanding shares of Jaguar common stock entitled to vote, a Jaguar stockholder's failure to vote in person or by proxy at the annual meeting, or an abstention from voting, or the failure of a holder of Jaguar common

Table of Contents

stock who holds his or her shares in "street name" through a broker or other nominee to give voting instructions to such broker or other nominee, will have the same effect as a vote "AGAINST" adoption of this proposal.

Recommendation of the Jaguar Board

THE JAGUAR BOARD UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE AMENDMENT OF THE 2014 PLAN.

THE MERGER IS CONDITIONED ON APPROVAL OF THIS PROPOSAL.

Jaguar Proposal 5: Adoption of Jaguar's Third Amended and Restated Certificate of Incorporation to Authorize a Class of Non-Voting Common Stock and Change the Jaguar Corporate Name

At the Jaguar special meeting, holders of Jaguar common stock will be asked to adopt Jaguar's Third Amended and Restated Certificate of Incorporation to (i) increase the number of authorized shares of common stock from 50 million shares to 225 million shares, (ii) authorize a class of non-voting common stock, (iii) require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and (iv) change the Jaguar corporate name to "Jaguar Health, Inc." Holders of Jaguar common stock should read this joint proxy statement/prospectus carefully and in its entirety, including the annexes, for more detailed information concerning the merger agreement and merger. A copy of Jaguar's Third Amended and Restated Certificate of Incorporation is attached to this joint proxy statement/prospectus as *Annex B*.

Required Vote of Stockholders

The adoption of Jaguar's Third Amended and Restated Certificate of Incorporation to (i) increase the number of authorized shares of common stock from 50 million shares to 225 million shares, (ii) authorize a class of non-voting common stock, (iii) require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and (iv) change the Jaguar corporate name to "Jaguar Health, Inc." (this Proposal 5) is one of the conditions to the consummation of the merger. The merger consideration consists of common stock and non-voting common stock; thus, Jaguar must adopt its Third Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock and to create this class of non-voting common stock. Shares of Jaguar non-voting common stock are the same in all respects to shares of Jaguar's common stock except that holders of shares of non-voting common stock are not entitled to vote on matters submitted to Jaguar stockholders (other than in connection with a change of control of Jaguar), and shares of non-voting common stock are convertible into shares of common stock on a one-for-one basis (i) at the option of the respective holders thereof, at any time and from time to time on or after April 1, 2018 or (ii) automatically, without any payment of additional consideration by the holder thereof, (x) upon a transfer of such shares to any person or entity that is neither an affiliate of Nantucket nor an investment fund, investment vehicle or other account, that is, directly or indirectly, managed or advised by Nantucket or any of its affiliates pursuant to a sale of such stock to a third-party for cash in accordance with the terms and condition set forth in the Investor Rights Agreement, or (y) upon the release or transfer of such shares to the registered holders of Napo's outstanding shares of common stock immediately prior to the consummation of the merger (such shareholders sometimes referred to herein as the Napo Legacy Stockholders).

In addition, in connection with the execution of the merger agreement and the Nantucket Settlement Agreement, Jaguar and Nantucket entered into the Investor Rights Agreement, which provides, among other things, that Jaguar cannot pay any dividends on any shares of its capital stock or

Table of Contents

redeem any shares, except in limited circumstances, without the prior written consent of Nantucket. Thus, Jaguar must adopt its Third Amended and Restated Certificate of Incorporation to restrict the issuance of dividends without the prior written consent of Nantucket.

To approve the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation (this Proposal 5), the affirmative vote of a majority of the outstanding shares of Jaguar common stock, voting together as a single class and entitled to vote, is required for such proposal. Because approval is based on the affirmative vote of a majority of the outstanding shares of Jaguar common stock entitled to vote, a Jaguar stockholder's failure to vote in person or by proxy at the special meeting, or an abstention from voting, or the failure of a holder of Jaguar common stock who holds his or her shares in "street name" through a broker or other nominee to give voting instructions to such broker or other nominee, will have the same effect as a vote "**AGAINST**" adoption of this proposal.

Recommendation of the Jaguar Board

THE JAGUAR BOARD UNANIMOUSLY RECOMMENDS A VOTE "**FOR**" THE ADOPTION OF JAGUAR'S THIRD AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO CREATE A CLASS OF NON-VOTING COMMON STOCK AND CHANGE THE JAGUAR CORPORATE NAME TO "JAGUAR HEALTH, INC."

THE MERGER IS CONDITIONED ON APPROVAL OF THIS PROPOSAL.

Jaguar Proposal 6: Approval to Adjourn the Special Meeting if Necessary or Advisable to Permit Further Solicitation of Proxies in the Event There are Not Sufficient Votes at the Time of the Special Meeting to Approve the Jaguar Proposals

At the Jaguar special meeting, holders of Jaguar common stock will be asked to approve the adjournment of the special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to approve (i) the issuance of shares described in Proposals 1 through 3, (ii) the amendment of the 2014 Plan described in Proposal 4, and/or (iii) the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation described in Proposal 5.

Required Vote of Stockholders

To approve the adjournment of the special meeting, if necessary or advisable to solicit additional proxies if there are not sufficient votes to adopt the merger agreement at the time of the special meeting (this Proposal 6), the affirmative vote of the holders of a majority of shares of Jaguar common stock, if a quorum is present, is required. The chairman of the meeting may also (regardless of the outcome of the stockholder vote on adjournment) adjourn the meeting to another place, date and time. If a quorum is not present, a majority of the voting stock represented in person or by proxy, or the chairman of the meeting, may adjourn the meeting until a quorum is present. Shares held by stockholders who are not present at the special meeting in person or by proxy will have no effect on the outcome of any vote to adjourn the special meeting. Broker non-votes and abstentions will have no effect on the outcome of any vote to adjourn the special meeting if a quorum is present but will have the same effect as a vote "**AGAINST**" if no quorum is present.

Recommendation of the Jaguar Board

THE JAGUAR BOARD UNANIMOUSLY RECOMMENDS A VOTE "**FOR**" THE APPROVAL TO ADJOURN THE SPECIAL MEETING IF NECESSARY OR ADVISABLE TO PERMIT FURTHER SOLICITATION OF PROXIES IN THE EVENT THERE ARE NOT SUFFICIENT VOTES AT THE TIME OF THE SPECIAL MEETING TO APPROVE (I) THE ISSUANCE OF SHARES DESCRIBED IN PROPOSALS 1 THROUGH 3, (II) THE AMENDMENT OF THE 2014 PLAN DESCRIBED IN PROPOSAL 4, AND/OR (III) THE ADOPTION OF JAGUAR'S THIRD AMENDED AND RESTATED CERTIFICATE OF INCORPORATION DESCRIBED IN PROPOSAL 5.

Table of Contents**SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE OF JAGUAR**

Section 16(a) of the Exchange Act, and regulations of the SEC thereunder require Jaguar's directors, officers and persons who own more than 10% of Jaguar's common stock, as well as certain affiliates of such persons, to file initial reports of their ownership of Jaguar's common stock and subsequent reports of changes in such ownership with the SEC. Directors, officers and persons owning more than 10% of Jaguar's common stock are required by SEC regulations to furnish Jaguar with copies of all Section 16(a) reports they file. Based solely on Jaguar's review of the copies of such reports and amendments thereto received by Jaguar and written representations from these persons that no other reports were required, Jaguar believes that during the fiscal year ended December 31, 2017, Jaguar's directors, officers and owners of more than 10% of Jaguar's common stock complied with all applicable filing requirements.

EQUITY COMPENSATION PLAN INFORMATION OF JAGUAR

The following table provides information about Jaguar common stock that may be issued upon the exercise of options, warrants and rights under all of Jaguar's existing equity compensation plans as of December 31, 2016.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Restricted Stock, and RSUs	Weighted-Average Exercise Price of Outstanding Options, Restricted Stock, and RSUs	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans(1)
Equity Compensation Plans Approved by Security Holders:			
2013 Equity Incentive Plan(1)	565,377	\$ 3.64	
2014 Stock Incentive Plan	2,005,843	\$ 2.20	39,988

- (1) Jaguar's 2013 Equity Incentive Plan was terminated in May 2015 in connection with Jaguar's initial public offering and replaced by the 2014 Stock Plan, although the 2013 Equity Incentive Plan continues to govern the administration of awards made prior to its replacement by the 2014 Stock Incentive Plan.

Table of Contents**COMPENSATION OF DIRECTORS AND EXECUTIVE OFFICERS OF JAGUAR****Summary Compensation Table**

The total compensation paid to Jaguar's principal executive officer and its three highest compensated executive officers other than the principal executive officer, respectively, for services rendered in 2016, 2015 and 2014, as applicable, is summarized as follows:

	Year	Salary (\$)	Bonus (\$)	Severance (\$)	Option awards \$(1)	Stock awards \$(2)	All other compensation \$(3)	Total (\$)
Lisa A. Conte	2016	446,205			435,493		14,923	896,622
President and Chief Executive Officer	2015	421,539	45,000				12,001	478,540
	2014	330,769			236,797	86,071	10,055	663,692
Steven R. King, Ph.D.	2016	284,456			84,584		29,241	398,281
Executive Vice President, Sustainable Supply, Ethnobotanical Research and Intellectual Property	2015	268,731	19,125				26,568	314,424
	2014	210,865			160,383	50,208	18,226	439,682
Karen S. Wright	2016	243,385			68,863			312,248
Chief Financial Officer and Treasurer(4)	2015	32,308			18,126			50,434
	2014							
John A. Kallassy	2016	93,664		71,625			13,828	179,117
Chief Operating Officer, Former Chief Financial Officer and Former Treasurer(5)	2015	265,808	24,836		45,100	7,666	26,568	369,978
	2014	181,731			118,398	43,035	19,207	362,371
Roger Waltzman	2016	165,000	10,000		95,730			270,730
Chief Scientific Officer(6)	2015							
	2014							

Footnotes to Summary Compensation Table

(1)

Represents the dollar amounts recognized for financial statement reporting purposes with respect to the fiscal year (for stock option awards) determined under FASB ASC Topic 718 using assumptions set forth in the footnotes to the financial statements in the Annual Report on Form 10-K for the years ended 2016 and 2015. The following are the options held by each executive officer as of December 31, 2016:

a.

Ms. Conte an aggregate of 764,179 shares were granted as follows: 16,998 shares granted December 19, 2016, 318,000 shares granted September 22, 2016, 69,970 shares granted April 1, 2016 which became effective at the annual stockholders' meeting of June 14, 2016, 113,212 shares granted July 7, 2015 which became effective at the annual stockholders' meeting of June 14, 2016, 85,616 shares granted July 2, 2015 which became effective at the annual stockholders' meeting of June 14, 2016, and 160,383 shares granted April 1, 2014;

b.

Dr. King an aggregate of 199,299 shares were granted as follows: 4,496 shares granted December 19, 2016, 23,042 shares granted September 22, 2016, 28,263 shares granted April 1, 2016 which became effective at the annual stockholders' meeting of June 14, 2016, 49,942 shares granted July 2, 2015 which became effective at the annual stockholders' meeting of June 14, 2016, and 93,556 shares granted April 1, 2014;

c.

Ms. Wright an aggregate of 130,366 shares were granted as follows: 2,866 shares granted December 19, 2016, 103,698 shares granted September 22, 2016, 3,802 shares granted April 1, 2016 which became effective at the annual stockholders' meeting of June 14, 2016, and 20,000 shares granted November 23, 2015;

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

d.

Mr. Kallassy 80,191 shares were granted April 1, 2014 and 13,365 shares granted May 13, 2015.

e.

Dr. Waltzman an aggregate of 130,366 shares were granted as follows: 2,866 shares granted December 19, 2016 and 127,500 shares granted August 12, 2016.

All of the April 1, 2014 option grants vested 25% on January 1, 2015 (nine months from grant date), with the remainder vesting equally over the following 27 months such that the options are vested in full on April 1, 2017. Ms. Wright's November 23, 2015 option vested 25% on September 9, 2016, with the remainder vesting equally over the following 27 months such that the option is vested in full on November 9, 2018. All of the July 2, 2015 options were granted contingent upon approval of Jaguar's stockholders at the June 14, 2016 annual stockholders' meeting

Table of Contents

and vest 1/36th per month beginning one month after grant date, with the remainder vesting equally over the following 35 months such that the option is vested in full on July 2, 2018. Ms. Conte's July 7, 2015 option was likewise granted contingent upon approval of Jaguar's stockholders at the June 14, 2016 annual stockholders' meeting and vests 1/36th per month beginning one month after grant date, with the remainder vesting equally over the following 35 months such that the option is vested in full on July 7, 2018. All of the options granted on April 1, 2016 which became effective at the annual stockholders' meeting of June 14, 2016, September 22, 2016 and December 19, 2016 vest 1/36th per month beginning one month after grant, with the remainder vesting equally over the following 35 months such that the option is vested in full on December 19, 2019. Mr. Kallassy's May 13, 2015 option grant vested 25% on June 19, 2015, with the remainder vesting equally over the following 27 months such that the option would have vested in full on September 19, 2017 had Mr. Kallassy not resigned in March 2016. Pursuant to Mr. Kallassy's separation agreement, dated April 28, 2016, all of Mr. Kallassy's stock options that remained unvested as of the date of the separation agreement were immediately accelerated to become fully vested. Mr. Kallassy had 90 days following the date of the separation agreement to exercise such stock options, after which any unexercised options were cancelled. Dr. Waltzman's August 12, 2016 option vested 2/36th on the grant date, with 7/36th vesting on April 1, 2017 and the remainder vesting equally over the following 27 months such that the option would have vested in full on July 1, 2019 had Dr. Waltzman not resigned in April 2017. Dr. Waltzman's stock options that are vested as of the effective date of his resignation, April 3, 2017, must be exercised within 3 months of such resignation or such options are cancelled, pursuant to the Company's 2014 Stock Incentive Plan. Any stock options that are unvested as of the effective date of his resignation are cancelled on such date of resignation.

- (2) Represents the dollar amounts recognized for financial statement reporting purposes with respect to the fiscal year (for restricted stock unit awards) determined under FASB ASC Topic 718 using assumptions set forth in the footnotes to the financial statements of Jaguar included in this joint proxy statement/prospectus. The aggregate number of restricted stock units held by each executive officer at December 31, 2016 and 2015 was as follows: Ms. Conte 8,910 of the 17,820 units granted June 2, 2014; Dr. King 5,198 of the 10,395 units granted June 2, 2014; Mr. Kallassy 0 of the 8,910 units granted June 2, 2014 and 0 of the 1,484 units granted May 13, 2015. All of the restricted stock units vested and were exchanged for shares of common stock on 01/01/2016. The remaining 50% will vest and be issuable on 07/01/2017. Vesting is subject to the Reporting Person's continued employment with Jaguar through the applicable vesting dates. Each restricted stock unit represents the right to receive, at settlement, one (1) share of Jaguar's common stock.
- (3) Amounts shown in this column reflect incremental health insurance premiums paid for such executive's family members. Mr. Kallassy also received \$6,954 in income associated with COBRA insurance premiums paid on his behalf in 2016.
- (4) Ms. Wright has served as Chief Financial Officer and Treasurer since December 15, 2015. Compensation includes all earnings since joining the Company on November 9, 2015.
- (5) Mr. Kallassy resigned as Chief Financial Officer and Treasurer on December 15, 2015.
- (6) Dr. Waltzman became the Chief Scientific Officer on July 1, 2016 and resigned on April 3, 2017.

Narrative to Summary Compensation Table

Understanding Jaguar's history is key to the understanding of Jaguar's compensation structure for 2015 and 2016. After Jaguar's initial public offering closed on May 18, 2015, the executive officers of privately-held Jaguar Animal Health, Inc. became Jaguar's named executive officers.

Base Salary

On July 2, 2015, the Compensation Committee increased Ms. Conte's annual base salary from \$400,000 to \$440,000, Dr. King's annual base salary from \$255,000 to \$280,500, and Mr. Kallassy's annual base salary from \$245,000 to \$286,500. The pay increases were effective June 15, 2015. On December 15, 2015, upon receiving the resignation of Mr. Kallassy, Jaguar's Board of Directors appointed Karen S. Wright as Jaguar's new Chief Financial Officer. Ms. Wright's annual base salary is \$240,000. Dr. Waltzman's annual base salary is \$330,000.

Table of Contents

Bonuses

On July 10, 2015, Jaguar paid discretionary bonuses to Ms. Conte, Dr. King and Mr. Kallassy of \$45,000, \$19,125 and \$17,913, respectively. Jaguar also paid an additional bonus of \$6,923 to Mr. Kallassy on February 6, 2015. The amount of each of these bonuses is set forth in the "Bonus" column in the Summary Compensation Table.

Jaguar paid sign-on bonuses to Dr. Waltzman of \$10,000 of which \$5,000 was paid on September 30, 2016 and \$5,000 was paid on October 15, 2016.

Severance

Jaguar paid discretionary severance to Mr. Kallassy of \$71,625, of which \$23,875 was remitted on May 13, 2016, June 15, 2016 and June 30, 2016, respectively. The amount of severance is set forth in the "Severance" column in the Summary Compensation Table.

Equity Compensation

Ms. Conte, Dr. King and Mr. Kallassy received stock option grants at the time they were hired by privately-held Jaguar Animal Health, Inc. Such options generally vest over time, with 25% of the options vesting after nine months of employment and monthly vesting thereafter with full vesting after three years. Ms. Wright and Dr. Waltzman each received stock option grants with a similar vesting schedule at the time they were hired by Jaguar. Jaguar's board of directors periodically grants additional options to the current named executive officers that typically vest ratably over a three-year period.

Upon Jaguar's initial public offering on May 18, 2015, the named executive officers received RSUs. Fifty percent of the RSUs shares vested and were issued on 01/01/2016, and, subject to the terms of the RSU award, the remaining 50% will vest and be issuable on 07/01/2017.

All stock options and restricted stock units issued to Jaguar's current named executive officers vest and become exercisable upon a change in control.

Table of Contents**Outstanding Equity Awards at 2016 Fiscal Year End**

The following table provides information regarding outstanding equity awards held by Jaguar's named executive officers as of December 31, 2016:

	Options Vesting Commencement Date	Number of Securities Underlying Unexercised Options		Option exercise price	Stock Option expiration date	Number of securities underlying unexercised RSUs(10)
		Exercisable	Unexercisable			
Lisa A. Conte	4/1/2014	142,562	17,821(1)\$	2.53	4/1/2024	8,910
	7/2/2015	40,429	45,187(4)\$	5.09	7/2/2025	
	7/7/2015	53,460	59,752(5)\$	4.84	7/7/2025	
	4/1/2016	15,548	54,422(7)\$	1.58	4/1/2026	
	9/22/2016	26,500	291,500(8)\$	1.25	9/22/2026	
	12/19/2016		16,998(9)\$	0.74	12/19/2026	
Steven R. King, Ph.D.	4/1/2014	83,160	10,396(1)\$	2.53	4/1/2024	5,198
	7/2/2015	23,583	26,359(4)\$	5.09	7/2/2025	
	4/1/2016	6,280	21,983(7)\$	1.58	4/1/2026	
	9/22/2016	1,920	21,122(8)\$	1.25	9/22/2026	
	12/19/2016		4,496(9)\$	0.74	12/19/2026	
Karen S. Wright	11/9/2015	7,222	12,778(3)\$	2.04	11/23/2025	
	4/1/2016	844	2,958(7)\$	1.58	4/1/2026	
	9/22/2016	8,641	95,057(8)\$	1.25	9/22/2026	
	12/19/2016		2,866(9)\$	0.74	12/19/2026	
John A. Kallassy	4/1/2014	44,549	35,642(1)\$	2.53	4/1/2024	
	9/19/2014	5,567	13,365(2)\$	7.00	5/13/2025	
Roger Waltzman	7/1/2016	7,083	120,417(6)\$	1.47	8/12/2026	
	12/19/2016		2,866(9)\$	0.74	12/19/2026	

- (1) On January 1, 2015, 25% of each of such named executive officer's shares vested and became exercisable. The remainder of the shares vested in approximately equal monthly installments through April 1, 2017, subject to continued service with Jaguar through each relevant vesting date.
- (2) The shares were granted on May 18, 2015. On December 19, 2014, 1/12th of the options were retroactively vested and became exercisable, with the remainder of the shares vesting in equal monthly installments such that they would have vested in full on September 19, 2017 had Mr. Kallassy not resigned in March 2016.
- (3) The shares were granted on November 23, 2015. On August 9, 2016, 25% of such named executive officer's shares vested and became exercisable. The remainder of the shares is scheduled to vest in approximately equal monthly installments through November 9, 2018, subject to continued service with Jaguar through each relevant vesting date.
- (4) The shares were granted on July 2, 2015 contingent upon the approval of Jaguar's stockholders at the June 14, 2016 annual stockholders' meeting and vest 1/36th per month beginning one month after grant date, with the remainder vesting equally over the following 35 months such that the option is vested in full on July 2, 2018, subject to continued, subject to continued service with Jaguar through each relevant vesting date.
- (5) The shares were granted on July 7, 2015 contingent upon the approval of Jaguar's stockholders at the June 14, 2016 annual stockholders' meeting and vest 1/36th per month beginning one month after grant date, with the remainder vesting equally over the following 35 months such that the option is vested in full on July 7, 2018, subject to continued service with Jaguar through each relevant vesting date.

Table of Contents

- (6) The shares were granted on August 12, 2016 and vest 2/36th on the grant date, 7/36th vested on April 1, 2017 with the remainder vesting equally over the following 27 months such that the option would have vested in full on July 1, 2019 had Dr. Waltzman not resigned in April 2017.
- (7) The options were granted on April 1, 2016, which became effective at the annual stockholders' meeting of June 14, 2016, and vest 1/36th per month beginning one month after grant, with the remainder vesting equally over the following 35 months such that the option is vested in full on April 1, 2019, subject to continued service with Jaguar through each relevant vesting date.
- (8) The options were granted on September 22, 2016 and vest 1/36th per month beginning one month after grant, with the remainder vesting equally over the following 35 months such that the option is vested in full on September 22, 2019, subject to continued service with Jaguar through each relevant vesting date.
- (9) The options were granted on December 19, 2016 and vest 1/36th per month beginning one month after grant, with the remainder vesting equally over the following 35 months such that the option is vested in full on December 19, 2019, subject to continued service with Jaguar through each relevant vesting date.
- (10) 50% of the shares of common stock underlying the RSUs vested and became issuable on January 1, 2016, and assuming compliance with the terms of the RSU award agreement, the remaining 50% of the shares of common stock underlying the RSUs will vest and be issuable on July 1, 2017.

Executive Employment Agreements

Lisa A. Conte

In March 2014, Jaguar entered into an offer letter with Ms. Conte to serve as Jaguar's Chief Executive Officer, effective March 1, 2014, in an at-will capacity. Under this offer letter, Ms. Conte's annual base salary is \$400,000, and she is eligible for an annual target bonus of 30% of her base salary. Effective June 15, 2015, Jaguar's board of directors has reviewed the terms of Ms. Conte's employment arrangement in connection with its annual compensation review, and has adjusted Ms. Conte's base salary to \$440,000. Ms. Conte is entitled to participate in all employee benefit plans, including group health care plans and all fringe benefit plans.

In April 2014, Ms. Conte was granted a stock option to purchase 160,383 shares of common stock at an exercise price of \$2.54 per share. The option has a 10-year term and vests as follows: 25% vested on January 1, 2015, 9 months after the grant date, with the remainder vesting equally over the next 27 months such that the option was vested in full on April 1, 2017. On June 2, 2014, Ms. Conte was granted 17,820 restricted stock units, or RSUs. Fifty percent of the shares of common stock underlying the RSUs vested and were issued on January 1, 2016, and the remaining 50% will vest and be issuable on July 1, 2017 pursuant to the terms of the RSU agreement. In the event of a change in control, as defined in the Jaguar Animal Health, Inc. 2013 Equity Incentive Plan, or the 2013 Plan, the vesting of all outstanding awards granted to Ms. Conte under the 2013 Plan will accelerate if Ms. Conte's service with Jaguar is terminated without cause within twelve months of the change in control.

Steven R. King, Ph.D.

In February 2014, Jaguar entered into an offer letter with Dr. King to serve as Jaguar's Executive Vice President, Sustainable Supply, Ethnobotanical Research and Intellectual Property, effective March 1, 2014, in an at-will capacity. Under the offer letter, Dr. King's annual base salary of \$255,000, he is eligible for an annual target bonus of 30% of his base salary, and he is eligible to participate in the employee benefit plans Jaguar offers to its other employees. Effective June 15, 2015, Jaguar's board of directors has reviewed the terms of Dr. King's employment arrangement in connection with its

Table of Contents

annual compensation review, and has adjusted Dr. King's base salary to \$280,500. Dr. King is entitled to participate in all employee benefit plans, including group health care plans and all fringe benefit plans.

In April 2014, Dr. King was granted a stock option to purchase 93,556 shares of common stock at an exercise price of \$2.54 per share. The option has a 10-year term and vests as follows: 25% vested on January 1, 2015, 9 months after the grant date, with the remainder vesting equally over the next 27 months such that the option was vested in full on April 1, 2017. In June 2014, Dr. King was granted 10,395 RSUs. Fifty percent of the shares of common stock underlying the RSUs vested and were issued on January 1, 2016, and the remaining 50% will vest and be issuable on July 1, 2017 pursuant to the terms of the RSU agreement. In the event of a change in control, as defined in the 2013 Plan, the vesting of all outstanding awards granted to Dr. King under the 2013 Plan will accelerate if Dr. King's service with us is terminated without cause within twelve months of the change in control.

John A. Kallassy

In January 2014, Jaguar entered into an offer letter with Mr. Kallassy to serve as Jaguar's Executive Vice President and Chief Operating Officer, effective as upon the closing of Jaguar's first sale of Series A preferred stock on February 5, 2014. Effective as of September 19, 2014, Jaguar entered into a new offer letter with Mr. Kallassy in connection with his appointment to serve as Jaguar's Chief Financial Officer. Under the current offer letter, Mr. Kallassy's annual base salary is \$245,000, and he is eligible for an annual target bonus of 30% of his base salary and is eligible to participate in the employee benefit plans that Jaguar offers to its other employees. Effective June 15, 2015, Jaguar's board of directors has reviewed the terms of Mr. Kallassy's employment arrangement in connection with its annual compensation review, and has adjusted Mr. Kallassy's base salary to \$286,500 and his target bonus was increased to 35% of his base salary. Mr. Kallassy is entitled to participate in all employee benefit plans, including group health care plans and all fringe benefit plans.

In April 2014, Mr. Kallassy was granted a stock option to purchase 80,191 shares of common stock at an exercise price of \$2.54 per share. The option has a 10-year term and vests as follows: 25% vested on January 1, 2015, 9 months after the grant date, with the remainder vesting equally over the next 27 months such that the option would have vested in full on April 1, 2017 had Mr. Kallassy not resigned in March 2016. Pursuant to Mr. Kallassy's separation agreement, dated April 28, 2016, all of Mr. Kallassy's stock options that remained unvested as of the date of the separation agreement were immediately accelerated to become fully vested. Mr. Kallassy had 90 days following the date of the separation agreement to exercise such stock options. In June 2014, Mr. Kallassy was granted 8,910 RSUs and in February 2015, Mr. Kallassy was granted 1,484 RSUs. Fifty percent of the shares of common stock underlying the RSUs vested and were issued on January 1, 2016, and the remaining 50% would have vested and become issuable on July 1, 2017 pursuant to the terms of the RSU agreement had Mr. Kallassy not resigned in March 2016. Jaguar also agreed that Mr. Kallassy was eligible for the grant of an additional 1,484 RSUs, as well as an option to purchase an additional 13,365 shares of common stock, subject to approval by Jaguar's board of directors. Accordingly, in February 2015, Jaguar's board of directors granted Mr. Kallassy the additional 1,484 RSUs (which have the same terms as those granted in June 2014), and granted an option to purchase 13,365 shares of common stock at an exercise price equal to \$7.00, which was the initial public offering price of Jaguar's common stock. This option had a 10-year term and vested as follows: 1/12 vested 3-months after the grant date, with the remainder vesting in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date, subject to continued service with Jaguar through each relevant vesting date.

Table of Contents**Karen S. Wright**

In October 2015, Jaguar entered into an offer letter with Ms. Wright to serve as Jaguar's Executive Vice President, Finance, effective November 9, 2015, in an at-will capacity. On December 15, 2015, the Board of Directors approved Ms. Wright's appointment to serve as Jaguar's Chief Finance Officer. Under the offer letter, Ms. Wright's annual base salary is \$240,000, she is eligible for an annual target bonus of 25% of her base salary, and she is eligible to participate in the employee benefit plans Jaguar offers to its other employees.

In November 2015, Ms. Wright was granted a stock option to purchase 20,000 shares of common stock at an exercise price of \$2.04 per share. The option has a 10-year term and vested as follows: 25% vested on August 9, 2016, 9 months after the hire date, with the remainder vesting equally over the next 27 months such that the option is vested in full on November 9, 2018.

Roger Waltzman

In June 2016, Jaguar entered into an offer letter with Dr. Waltzman to serve as Jaguar's Chief Scientific Officer, effective July 1, 2016, in an at-will capacity. Under the offer letter, Dr. Waltzman's annual base salary is \$330,000, he is eligible for an annual target bonus of 40% of his base salary, and he is eligible to participate in the employee benefit plans Jaguar offers to its other employees.

Dr. Waltzman also received a sign-on bonus of \$10,000 of which \$5,000 was paid on September 30, 2016 and \$5,000 was paid on October 15, 2016.

In August 2016, Dr. Waltzman was granted a stock option to purchase 127,500 shares of common stock at an exercise price of \$1.47 per share. The option has a 10-year term and vests as follows: 2/36th on the grant date, 7/36th on April 1, 2017, with the remainder vesting equally over the subsequent 27 months such that the option would have vested in full on July 1, 2019 had Dr. Waltzman not resigned in April 2017.

Compensation of Directors

The following table summarizes the total compensation earned in 2015 for Jaguar's non-management directors. Ms. Conte receives no additional compensation for her service as a director.

	Year	Fees Earned or Paid in Cash (\$)	Option awards \$(1)	Total (\$)
James J. Bochnowski	2016		63,644	63,644
	2015		58,377	58,377
Folkert W. Kamphuis	2016		17,625	17,625
	2015		145,944	145,944
Jiahao Qiu	2016		1,921	1,921
	2015		29,188	29,188
Zhi Yang	2016		1,921	1,921
	2015		29,188	29,188
John Micek III	2016		81,944	81,944
	2015			
Ari Azhir	2016		35,678	35,678
	2015			

Footnote to Compensation of Directors Table

- (1) Represents the dollar amounts recognized for financial statement reporting purposes with respect to the fiscal year (for stock option awards) determined under FASB ASC Topic 718 using

Table of Contents

assumptions set forth in the footnotes to Jaguar's financial statements attached to this joint proxy statement/prospectus. The aggregate number of options held by each non-management director officer as of December 31, 2016 was as follows: Mr. Bochnowski 39,410 shares granted June 2, 2014 and 20,000 shares granted June 2, 2015; Mr. Kamphuis 50,000 shares granted June 2, 2015; Mr. Qiu 10,000 shares granted June 2, 2015; Dr. Yang 10,000 shares granted June 2, 2015. The June 2, 2014 grant to Mr. Bochnowski vests 25% on March 2, 2015 (nine months from grant date), with the remainder vesting equally over the following 27 months such that the options are vested in full on June 2, 2017. All of the June 2, 2015 option grants vest in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

Narrative to Director Compensation Table

Jaguar currently does not pay its directors any cash compensation for their services on Jaguar's board of directors. Jaguar intends to make annual equity grants to directors serving on its board who are not employees nor serving as designees of its investors, along with an additional equity grant to the Chairperson of its board of directors. Jaguar may in the future determine to make additional equity grants or pay other equity compensation for service on its board of directors.

In June 2014, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 39,410 shares of common stock at an exercise price of \$4.83 per share, which expires 10 years after the grant date. The option vested as follows: 25% vested on March 2, 2015, 9 months after the grant date, with the remainder vesting equally over the next 27 months such that the option is vested in full on June 2, 2017.

In June 2015, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 20,000 shares of common stock at an exercise price of \$6.70 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 11,293 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In September 2016, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 75,000 shares of common stock at an exercise price of \$1.25 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In December 2016, Jaguar granted Mr. Bochnowski, its Chairperson of the Board, a stock option to acquire 16,378 shares of common stock at an exercise price of \$0.74 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

Mr. Kamphuis provided consulting services through Kernel Management and Consulting AG from December 2015 through March 2016.

In June 2015, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 50,000 shares of common stock at an exercise price of \$6.70 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 9,504 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

In August 2016, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 50,000 shares of common stock at an exercise price of \$1.47 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In September 2016, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 13,000 shares of common stock at an exercise price of \$1.25 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In December 2016, Jaguar granted Mr. Kamphuis, a member of the Compensation and Nominating Committees, a stock option to acquire 13,771 shares of common stock at an exercise price of \$0.74 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In June 2015, Jaguar granted Mr. Qui, a member of the Audit Committee, a stock option to acquire 10,000 shares of common stock at an exercise price of \$6.70 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Mr. Qui, a member of the Audit Committee, a stock option to acquire 1,901 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In June 2015, Jaguar granted Dr. Yang, a member of the Audit Committee, a stock option to acquire 10,000 shares of common stock at an exercise price of \$6.70 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Dr. Yang, a member of the Audit Committee, a stock option to acquire 1,901 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In April 2016, Jaguar granted Mr. Micek, a member of the Audit, Compensation and Nominating Committees, a stock option to acquire 96,824 shares of common stock at an exercise price of \$1.58 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In December 2016, Jaguar granted Mr. Micek, a member of the Audit, Compensation and Nominating Committees, a stock option to acquire 10,884 shares of common stock at an exercise price of \$0.74 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

In December 2016, Jaguar granted Dr. Azhir, a member of the Audit and Compensation Committees, a stock option to acquire 98,050 shares of common stock at an exercise price of \$0.74 per share, which expires 10 years after the grant date. The option vests in equal monthly installments such that it is vested in full on the 3-year anniversary of the grant date.

Table of Contents

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS OF JAGUAR

The following includes a summary of transactions since January 1, 2016, to which Jaguar has been a party in which the amount involved exceeded or will exceed \$120,000 and in which any of Jaguar's directors, executive officers or beneficial owners of more than 5% of Jaguar's capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest. Compensation arrangements for Jaguar's directors and executive officers are described elsewhere in this joint proxy statement/prospectus.

Transactions with Napo

Formation

Jaguar was founded in San Francisco, California as a Delaware corporation on June 6, 2013. Napo formed Jaguar to develop and commercialize animal health products. In connection with Jaguar's formation, Jaguar issued 2,666,666 shares of common stock to Napo, pursuant to a stock purchase agreement, for \$400 in cash and services to be provided by Napo to Jaguar pursuant to the Service Agreement discussed below. As of December 31, 2013, Jaguar was a wholly-owned subsidiary of Napo and as of December 31, 2014, Jaguar was a majority-owned subsidiary of Napo. As of May 13, 2015, Jaguar is no longer a majority-owned subsidiary of Napo.

On March 31, 2017, Jaguar, Napo, Merger Sub and a Napo representative entered into the Agreement and Plan of Merger, the terms of which are described elsewhere in this joint proxy statement/prospectus.

Napo/Salix Settlement Agreement

In March 2016, Napo settled ongoing litigation with Salix (now owned by Valeant Pharmaceuticals International) and rights to develop, manufacture and commercialize crofelemer previously licensed to Salix in December 2008 in North America, certain European Union countries and Japan were terminated and returned to Napo, along with certain crofelemer active pharmaceutical ingredient inventory, Mytesi® drug product inventory and land. Pursuant to the settlement agreement between Napo and Salix (together with any amendments thereto, sometimes referred to herein as the Napo/Salix Settlement Agreement), upon the consummation of the contemplated merger, Jaguar is required to enter into a letter agreement with Salix (sometimes referred to herein as the Letter Agreement) in the form set forth in Schedule 4.8(c) of the Letter Agreement, pursuant to which Jaguar will agree to assume, be bound by, and perform certain provisions of the Napo/Salix Settlement Agreement as though Jaguar were added alongside Napo as an additional named person for purposes of such provisions.

Napo Service Agreement

Effective July 1, 2016, Napo and Jaguar entered into an employee leasing and overhead allocation agreement (sometimes referred to herein as the 2016 Service Agreement). The initial term of the 2016 Service Agreement was from July 1, 2016 to December 31, 2016, and the term has been extended until the completion of a successful merger between the two companies, or until the proposed merger has been terminated. In connection with the 2016 Service Agreement, Jaguar provided to Napo the services of Jaguar employees, primarily in the areas of supply, manufacturing and quality control and general administrative positions. The 2016 Service Agreement stipulated that Napo reimburse Jaguar for a portion of Jaguar's overhead costs including an allocated amount for rent. For additional information relating to the 2016 Service Agreement, see "Napo Management's Discussion and Analysis of Financial Condition and Results of Operations Overview."

Table of Contents

Napo License Agreement

In January 2014, Jaguar entered into the Napo License Agreement, pursuant to the term sheet for which Jaguar paid Napo a \$100,000 option fee, and agreed to make royalty and milestone payments to Napo based on sales of Jaguar's products. Lisa A. Conte, Jaguar's Chief Executive Officer, President and member of Jaguar's board of directors is also the interim chief executive officer and serves on the board of directors of Napo. For additional information relating to the Napo License Agreement, see "Napo Business Intellectual Property Napo License".

In connection with the entry into certain financing arrangements in October 2014, or the Nantucket Financing Arrangements, Napo and Nantucket Investments Limited, or Nantucket, on behalf of Napo's secured lenders, entered into a non-disturbance agreement with respect to the Napo License Agreement. The non-disturbance agreement provides that Jaguar is a third party beneficiary of such agreement and also provides, among other items, that notwithstanding any transfer of or sale or other disposition by Nantucket of the intellectual property and technology licensed to us pursuant to the Napo License Agreement, including without limitation, in connection with any enforcement of the Nantucket Financing Arrangements, transfer in lieu of enforcement or by operation of law, the intellectual property and technology licensed to Jaguar pursuant to the Napo License Agreement shall remain subject to the Napo License Agreement, the Napo License Agreement shall survive in accordance with its terms, and Jaguar's rights under the Napo License Agreement shall not be terminated unless Jaguar fails to make payments thereunder within the time periods required.

Napo Arrangements

Lease

Jaguar's corporate headquarters were located in San Francisco, California, where Jaguar rented approximately 3,125 square feet of office space. Since Jaguar's formation in June 2013 through June 2015, Jaguar shared premises with Napo pursuant to its lease. See "Napo Service Agreement" above. Since March 2014, Jaguar made the rent payments under Napo's lease. The lease was assigned to Jaguar in June 2014 and expired in June 2015.

Napo Beneficial Ownership

The following table sets forth information with respect to beneficial ownership of Napo common stock by the current members of Jaguar's board of directors and Jaguar's executive officers. The column titled "Percentage of Shares Beneficially Owned" is based on a total of 108,202,786 shares of Napo common stock outstanding as of March 31, 2017.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to Napo common stock. Shares of Napo common stock subject to options or warrants and restricted stock units that, in each case, are currently exercisable or vested, or exercisable or subject to vesting within 60 days after the date of this joint proxy statement/prospectus are considered outstanding and beneficially owned by the person holding

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

the options or warrants for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
James J. Bochnowski(1)	7,007,020	6.5%
Lisa A. Conte(2)	1,394,380	1.3%
Jiahao Qiu		
Zhi Yang, Ph.D.(3)	2,151,174	2.0%
Steven R. King, Ph.D.(4)	389,116	*
Folkert W. Kamphuis		
John Micek, III		
Ari Azhir, Ph.D.		
Karen S. Wright		

*

Less than 1%.

(1)

Consists of 7,007,020 shares of Napo common stock held by the Bochnowski Family Trust. Mr. Bochnowski, a member of Jaguar's board of directors, is a co-trustee and beneficiary of such trust, and shares voting and investment control over such shares with his spouse.

(2)

Includes (i) 637,780 shares of Napo common stock and (ii) a fully-vested option to purchase 757,000 shares of Napo common stock. Ms. Conte, Jaguar's Chief Executive Officer, President and a member of Jaguar's board of directors, is the interim chief executive officer of Napo and a member of Napo's board of directors.

(3)

Includes (i) 30,828 shares of Napo common stock held by Dr. Yang; (ii) 65,309 shares of Napo common stock held by BioVeda China Limited, an entity affiliated with BioVeda Management, Ltd.; and (iii) 2,055,037 shares of Napo common stock held by BioVeda China LP, an entity affiliated with BioVeda Management, Ltd. Dr. Yang, a member of Jaguar's board of directors, is the Chairperson, Founder, Managing Partner and sole shareholder of BioVeda Management, Ltd., and may be deemed to beneficially own such shares.

(4)

Includes (i) 154,116 shares of Napo common stock and (ii) a fully-vested option to purchase 235,000 shares of Napo common stock. Dr. King, Jaguar's Executive Vice President of Sustainable Supply, Ethnobotanical Research and Intellectual Property, held an office in the same capacity at Napo.

In addition, Ms. Conte holds RSUs for an aggregate of 10,474,783 shares of Napo common stock (3,475,734 of which were issued prior to 2011; and 6,999,049 of which were issued in 2011 or later), and Dr. King holds RSUs for an aggregate of 2,042,098 shares of Napo common stock (1,073,273 of which were issued prior to 2011; and 968,825 of which were issued in 2011 or later). Assuming satisfaction of the service requirements, Napo's RSU awards granted in 2011 or later will vest and the shares will be issued when: (i) the performance criteria set out in the award agreement are met (which include (A) the repayment in full by Napo of certain debts owed to third parties and (B) Napo's successful resolution of the litigation against Salix) and (ii) there is a Napo liquidity event (such as a merger, an asset sale or a liquidation or dissolution). Napo's RSU awards granted prior to 2011 will vest and the shares will be issued when there is a Napo liquidity event. For all Napo RSUs, the vesting and issuance criteria must be satisfied by December 31, 2018 or the Napo RSUs will lapse. Pursuant to the merger agreement, at the effective time of the merger, each outstanding Napo RSU, option and warrant, whether or not vested, to receive Napo stock that is outstanding immediately prior to the effective time of the merger will be converted into an RSU, option or warrant to receive Jaguar common stock. See

Table of Contents

"Certain Relationships and Related Party Transactions Transactions with Napo Napo Merger Agreement".

Financings

Settlement Agreements and Investor Rights Agreement

On March 31, 2017, Napo entered into a settlement and discounted payoff agreement (sometimes referred to herein as the Nantucket Settlement Agreement), with the lenders party to Napo's financing agreement, dated as of October 10, 2014 (sometimes referred to herein as the Financing Agreement), and Nantucket, as collateral agent and administrative agent, pursuant to which Napo agreed, simultaneously with the consummation of the merger, (a) to make a cash payment to Nantucket of either \$8 million or \$8.5 million (depending upon the percentage of outstanding common stock represented by the shares released in the following clause (b)), which will reduce the outstanding principal obligations under the Financing Agreement, and (b) in satisfaction as a compromise for the outstanding obligations under the Financing Agreement and the release of any lien or security interest in respect of such outstanding obligations, (x) to transfer to Nantucket 2,666,666 shares of Jaguar common stock owned by Napo and (y) to cause Jaguar to issue to Nantucket 1,940,382 newly issued shares of Jaguar voting common stock and 38,380,028 newly issued shares of Jaguar non-voting common stock, which shares are subject to the terms of the Investor Rights Agreement described below.

Napo also entered into settlement agreements with certain additional creditors on or about March 31, 2017, pursuant to which Napo agreed to cause Jaguar to issue in the aggregate 4,722,567 shares of Jaguar non-voting common stock and warrants to purchase 1,237,283 shares of Jaguar common stock, with an exercise price of \$0.08 per share, to such creditors upon consummation of the merger as a complete settlement and satisfaction of Napo's outstanding obligations to such creditors. Jaguar also agreed to register the resale of these shares on one or more registration statements.

In connection with the execution of the merger agreement and the Nantucket Settlement Agreement, Jaguar and Nantucket entered into the Investor Rights Agreement, dated March 31, 2017 (sometimes referred to herein as the Investor Rights Agreement), pursuant to which, among other things, Jaguar has agreed to register the resale of the shares issued to Nantucket pursuant to the Nantucket Settlement Agreement on one or more registration statements. A portion of these shares will be held in escrow and released to either Nantucket or the former Napo stockholders, depending on whether Nantucket receives sufficient proceeds from the resale of the Tranche A Shares to third parties to satisfy the Hurdle Amounts. Examples illustrating the calculation of the number of shares released from escrow to Nantucket or the former Napo stockholders, as the case may be, and a summary of the Hurdle Amounts at different time periods are set forth in *Annex E* and *Annex F*, respectively, to this joint proxy statement/prospectus. The Investor Rights Agreement also provides that Jaguar cannot pay any dividends on any shares of its capital stock or redeem any shares, except in limited circumstances, without the prior written consent of Nantucket.

Riverside/MEF Exchangeable Promissory Notes

On March 1, 2017, Napo entered into a Note Purchase Agreement with certain purchasers, whereby Napo issued \$656,250 in aggregate principal amount of Original Issue Discount Exchangeable Promissory Notes due December 1, 2017 (sometimes referred to herein as the 2017 Exchangeable Notes) to such purchasers at a purchase price of \$525,000. The holders of the 2017 Exchangeable Notes may exchange the 2017 Exchangeable Notes for an aggregate of 1,171,875 shares of Jaguar common stock at any time prior to the maturity date and subsequent to the earlier of the effective date of the merger and the date on which the merger is terminated. Each purchaser is required to purchase its pro rata portion of additional 2017 Exchangeable Notes with an aggregate original principal amount

Table of Contents

of \$656,250 for an aggregate purchase price of \$525,000, which subsequent purchase will occur no later than the earlier of the consummation of the merger or the termination of the merger. Jaguar has agreed to file a registration statement to register the resale of shares of Jaguar common stock issuable upon exchange of the 2017 Exchangeable Notes within 30 days of the earlier of the effective date of the merger and the merger termination date.

Kingdon Convertible Promissory Notes

On March 31, 2017, Napo entered into an Amended and Restated Note Purchase Agreement (sometimes referred to herein as the Kingdon NPA) with Kingdon Associates, M. Kingdon Offshore Master Fund L.P., Kingdon Family Partnership, L.P., and Kingdon Credit Master Fund L.P. (and, together with any other party purchasing Kingdon Notes (as defined below) pursuant to the Kingdon NPA, sometimes collectively referred to herein as the Kingdon Purchasers), under which remains outstanding \$2,500,000 in aggregate principal amount of convertible promissory notes (sometimes referred to herein as the Kingdon Notes) issued by Napo on December 30, 2016 to such purchasers at a purchase price of \$2,000,000. Subject to the consummation of the merger, the holders of the Kingdon Notes may convert the Kingdon Notes into shares of Jaguar common stock at a conversion price of \$0.925 (i) from the date of the Kingdon Note until the day immediately preceding the one-year anniversary of the Kingdon Note, all, but not less than all, of one-third of the outstanding principal and interest of the Kingdon Note, (ii) from the one-year anniversary of the Kingdon Note until the day immediately preceding the two-year anniversary of the Kingdon Note, all, but not less than all, of an additional one-third of the outstanding principal and interest of the Kingdon Note, and (iii) from the two-year anniversary of the Kingdon Note and thereafter, all, but not less than all, of the outstanding principal and interest of the Kingdon Note. Subject to the satisfaction of certain conditions, each purchaser is required to purchase its pro rata portion of additional Kingdon Notes with an aggregate original principal amount of \$7,500,000 for an aggregate purchase price of \$6,000,000, which subsequent purchase will occur simultaneously with the consummation of the merger and with effect as of immediately prior to the consummation of the merger.

The Kingdon Notes accrue interest at a rate of 10% per annum and mature on the first date after December 30, 2019 on which a majority of the Kingdon Purchasers have provided written notice to Napo requesting payment in full of the outstanding principal and interest of the Kingdon Notes. The obligations of Napo under the Kingdon Notes are secured pursuant to the terms of the Security Agreement, dated December 30, 2016, by and among Napo, Kingdon Capital Management L.L.C. and the purchasers named therein (sometimes referred to herein as the Napo Security Agreement) and the Limited Subordination Agreement, dated December 30, 2016, by and among Napo, the Kingdon Purchasers, Nantucket, the lenders under the Financing Agreement, Dorsar Investment Company, Alco Investment Company and Two Daughters LLC (sometimes referred to herein as the Intercreditor Agreement). Jaguar has agreed to file a registration statement to register the resale of shares of Jaguar common stock issuable upon exchange of the 2017 Exchangeable Notes within 30 days of the earlier of the effective date of the merger and the merger termination date.

Indemnification Agreements

Jaguar has entered into indemnification agreements with each of Jaguar's directors. These agreements, among other things, require Jaguar to indemnify each director to the fullest extent permitted by Delaware law, including indemnification of expenses such as expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted incurred by the director or officer in any action or proceeding, including any action or proceeding by or in right of Jaguar, arising out of the person's services as a director or officer.

Table of Contents

Other Transactions

Jaguar has granted stock options and/or RSUs to Jaguar's executive officers. For a description of these options and RSUs, see the section above titled "Compensation of Directors and Executive Officers of Jaguar."

Jaguar also granted stock options to certain members of its board of directors. For a description of these stock options, see the section above titled "Compensation of Directors and Executive Officers of Jaguar."

Policies and Procedures for Related Person Transactions

Jaguar's board of directors has adopted a written related person transaction policy setting forth the policies and procedures for the review and approval or ratification of related-person transactions. This policy will cover, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act, any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships in which Jaguar was or is to be a participant, where the amount involved exceeds \$120,000 and a related person had or will have a direct or indirect material interest, including, without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by Jaguar of a related person. In reviewing and approving any such transactions, Jaguar's Audit Committee is tasked to consider all relevant facts and circumstances, including, but not limited to, whether the transaction is on terms comparable to those that could be obtained in an arm's length transaction and the extent of the related person's interest in the transaction. All of the transactions described in this section occurred prior to the adoption of this policy.

Table of Contents

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act, and regulations of the SEC thereunder require Jaguar's directors, officers and persons who own more than 10% of Jaguar common stock, as well as certain affiliates of such persons, to file initial reports of their ownership of Jaguar common stock and subsequent reports of changes in such ownership with the SEC. Directors, officers and persons owning more than 10% of Jaguar common stock are required by SEC regulations to furnish Jaguar with copies of all Section 16(a) reports they file. Based solely on Jaguar's review of the copies of such reports and amendments thereto received by Jaguar and written representations from these persons that no other reports were required, Jaguar believes that during the fiscal year ended December 31, 2016, Jaguar's directors, officers and owners of more than 10% of Jaguar common stock complied with all applicable filing requirements.

Table of Contents

INFORMATION ABOUT THE NAPO SPECIAL MEETING AND VOTE

Date, Time and Place of the Special Meeting

These proxy materials are delivered in connection with the solicitation by the Napo Board of proxies to be voted at the Napo special meeting, which is to be held at 201 Mission Street, Suite 2375, San Francisco, CA 94105, at [•] a.m., local time, on [•], 2017. On or about [•], 2017, Napo commenced mailing this joint proxy statement/prospectus and the enclosed form of proxy to its stockholders entitled to vote at the meeting.

Purpose of the Napo Special Meeting

Napo stockholders will be asked to vote on the following proposals:

1. To adopt the Agreement and Plan of Merger, dated as of March 31, 2017, by and among Jaguar Animal Health, Inc., Napo Acquisition Corporation, Napo Pharmaceuticals, Inc. and a representative of Napo Pharmaceuticals, Inc. (sometimes referred to as the merger agreement), and thereby approve the merger. A copy of the merger agreement has been included as *Annex A* to this joint proxy statement/prospectus.
2. To adjourn the special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to adopt the merger agreement.
3. To transact such other business as may properly come before the special meeting or any adjournment or postponement thereof.

Record Date and Voting Power

Only stockholders of record as of the close of business on [•], 2017 will be entitled to notice of and to vote at the special meeting or at any subsequent meeting due to an adjournment of the original meeting.

On the record date, [•], 2017, Napo had one class of voting stock outstanding. On that date, [•] shares of Napo common stock were issued and outstanding. Each outstanding share of common stock entitles the holder to one vote on all matters to be voted upon at the special meeting.

A complete list of stockholders entitled to vote at the Napo special meeting will be available for examination by any Napo stockholder at Napo's headquarters, 201 Mission Street, Suite 2375, San Francisco, CA 94105, for purposes pertaining to the Napo special meeting, during normal business hours for a period of ten days before the Napo special meeting, and at the time and place of the Napo special meeting.

Quorum and Voting Rights

In order to carry on the business of the meeting, Napo must have a quorum. A quorum requires the presence, in person or by proxy, of the holders of a majority of the votes entitled to be cast at the meeting. Proxies received but marked as abstentions, if any, and broker non-votes, if any, will be included in the calculation of the number of shares considered to be present at the meeting for quorum purposes. The affirmative vote of a majority of the outstanding shares of Napo common stock entitled to vote thereon is required to adopt the merger agreement and approve the merger.

Required Vote

To adopt the merger agreement, holders of a majority of the shares of Napo common stock issued and outstanding and entitled to vote thereon must vote in favor of adoption of the merger agreement.

Table of Contents

Because approval is based on the affirmative vote of a majority of the outstanding shares of Napo common stock entitled to vote, a Napo stockholder's failure to vote in person or by proxy at the special meeting, or an abstention from voting, or the failure of a Napo stockholder who holds his or her shares in "street name" through a broker or other nominee to give voting instructions to such broker or other nominee, will have the same effect as a vote "**AGAINST**" adoption of the merger agreement.

To approve the adjournment of the special meeting, if necessary or advisable to solicit additional proxies if there are not sufficient votes to adopt the merger agreement and approve the merger at the time of the special meeting, the affirmative vote of the majority of shares present in person or represented by proxy at the meeting and entitled to vote thereon is required, if a quorum is present. Whether or not a quorum is present, a majority of the voting stock represented in person or by proxy may adjourn the meeting until a quorum is present. Shares held by stockholders who are not present at the special meeting in person or by proxy will have no effect on the outcome of any vote to adjourn the special meeting. Broker non-votes and abstentions will have the same effect as a vote "**AGAINST**" the proposal to adjourn the special meeting.

Broker Non-Votes

If your shares are held in an account at a broker or through another nominee, you must instruct the broker or other nominee on how to vote your shares. If you do not provide voting instructions to your broker or other nominee, your shares will not be voted on any proposal on which your broker or other nominee does not have discretionary authority to vote. Broker non-votes, if any, will be counted as being present at the special meeting for purposes of determining a quorum, but will not be voted on those matters for which specific authorization is required. Brokers do not have discretionary authority to vote on the proposal to adopt the merger agreement and approve the merger, or the proposal to adjourn the special meeting. Therefore, if you do not provide voting instructions to your broker, your shares will not be voted on the proposal to adopt the merger agreement, or the proposal to adjourn the special meeting. A broker non-vote will have the same effect as a vote "**AGAINST**" adoption of the merger agreement and as a vote "**AGAINST**" the proposal to adjourn the special meeting.

Abstentions; Non-Voting

For the proposal to adopt the merger agreement and approve the merger, an abstention or a failure to vote will have the same effect as a vote "**AGAINST**" the proposal.

For the proposal to adjourn the Napo special meeting, if necessary or advisable, an abstention will have the same effect as a vote "**AGAINST**" adjourning the special meeting.

Appraisal Rights

Napo stockholders of record have appraisal rights under the DGCL in connection with the merger. Napo stockholders who do not vote in favor of the adoption of the merger agreement and who otherwise fully comply with and follow the applicable provisions of Section 262 will be entitled to exercise appraisal rights thereunder. Through an appraisal, the Court of Chancery of the State of Delaware will determine the "fair value" of Napo shares, which amount may be greater than, less than, or equal to the merger consideration. To exercise appraisal rights, Napo stockholders must (i) not vote in favor of the adoption of the merger agreement, (ii) deliver in the manner set forth below a written demand for appraisal of the stockholder's shares to the Corporate Secretary of Napo before the vote on the adoption of the merger agreement at the special meeting at which the proposal to adopt the merger agreement and approve the merger will be submitted to Napo's stockholders, (iii) continuously hold the shares of record from the date of making the demand through the effective time of the merger, and (iv) otherwise fully comply with and follow the requirements of Section 262. If, after the consummation of the merger, such holder of Napo common stock fails to perfect, withdraws or

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

otherwise loses his, her or its appraisal rights, each such share will be treated as if it had been converted as of the consummation of the merger into a right to receive the merger consideration.

The relevant provisions of Section 262 are included as *Annex D* to this joint proxy statement/prospectus. You are encouraged to read these provisions carefully and in their entirety. Due to the complexity of the procedures for exercising your appraisal rights, Napo stockholders who are considering exercising such rights are encouraged to seek the advice of legal counsel. Failure to comply with these provisions will result in the loss of appraisal rights. See the section entitled "Appraisal Rights" beginning on page 249 for additional information and the full text of Section 262 reproduced in its entirety as *Annex D* to this joint proxy statement/prospectus.

Shares Beneficially Owned by Napo Directors and Executive Officers

Napo's directors and executive officers held approximately 6.7% of the outstanding shares of Napo common stock on [•], 2017, the record date for the special meeting.

Voting of Shares; Proxies

Stockholders of record may vote in person by ballot at the special meeting or by submitting their proxies by mail, by indicating their vote on each proxy card they receive, signing and dating each proxy card returning each proxy card in the prepaid envelope that accompanied that proxy card.

Stockholders of Napo who hold their shares in "street name" by a broker, nominee, fiduciary or other custodian should refer to the proxy card or other information forwarded by their broker, nominee, fiduciary or other custodian for instructions on how to vote their shares.

Napo recommends you submit your proxy even if you plan to attend the special meeting. If you properly give your proxy and submit it to Napo in time to vote, one of the individuals named as your proxy will vote your shares as you have directed. If you attend the special meeting, you may vote by ballot, thereby cancelling any proxy previously submitted. If you hold your shares in "street name," you will have to obtain a legal proxy in your name from the broker, nominee, fiduciary or other custodian who holds your shares in order to vote in person at the special meeting. You may vote for or against the proposals or abstain from voting.

If you are a stockholder of record and submit your proxy but do not make specific choices, your proxy will follow the Napo Board's recommendations and your shares will be voted:

1. **"FOR"** the proposal to adopt the merger agreement and approve the merger.
2. **"FOR"** the proposal to adjourn the special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to adopt the merger agreement.

Under such circumstances, your proxy will constitute a waiver of your right of appraisal under Section 262 and will nullify any previously delivered written demand for appraisal under Section 262.

Revocability of Proxies and Changes to a Napo Stockholder's Vote

A Napo stockholder has the power to change its vote at any time before its shares are voted at the special meeting by:

notifying Napo's Corporate Secretary, [•], in writing at 201 Mission Street, Suite 2375, San Francisco, CA 94105, prior to the Napo special meeting that you are revoking your proxy;

executing and delivering a later dated proxy card; or

by attending the Napo special meeting and voting your shares in person.

Table of Contents

However, if your shares held in "street name" through a brokerage firm, bank, nominee, fiduciary or other custodian, you must check with your brokerage firm, bank, nominee, fiduciary or other custodian to determine how to revoke your proxy.

Solicitation of Proxies

The solicitation of proxies from Napo stockholders is made on behalf of the Napo Board. Napo will pay the costs of soliciting Napo stockholders and obtaining these proxies, including the cost of reimbursing brokers, banks and other financial institutions for forwarding proxy materials to their customers. Proxies may be solicited, without extra compensation, by Napo officers and employees by mail, telephone, fax, personal interviews or other methods of communication. Napo does not expect to engage a proxy solicitation firm to assist Napo in soliciting proxies for the special meeting.

Other Business; Adjournments

Napo is not currently aware of any other business to be acted upon at the Napo special meeting. If, however, other matters are properly brought before the special meeting, your proxies include discretionary authority on the part of the individuals appointed to vote your shares to act on those matters according to their best judgment.

Any adjournment may be made from time to time by the affirmative vote of the holders of a majority of the shares represented at the Napo special meeting in person or by proxy and entitled to vote thereat and, whether or not a quorum is present, without further notice other than by announcement at the meeting.

If the special meeting is adjourned to a different place, date or time, Napo need not give notice of the new place, date or time if the new place, date or time is announced at the meeting before adjournment, unless a new record date is set for the meeting. The Napo Board may fix a new record date if the meeting is adjourned. Proxies submitted by Napo stockholders for use at the special meeting will be used at any adjournment or postponement of the meeting. Unless the context otherwise requires, references to the Napo special meeting in this joint proxy statement/prospectus are to such special meeting as adjourned or postponed.

Attending the Meeting

Subject to space availability, all stockholders as of the record date, or their duly appointed proxies, may attend the meeting. Since seating is limited, admission to the meeting will be on a first-come, first-served basis. Registration and seating will begin at [•] a.m., local time.

If you are a registered stockholder (that is, if you hold your stock in certificate form), an admission ticket is enclosed with your proxy card. If you wish to attend the special meeting, please vote your proxy but keep the admission ticket and bring it with you to the special meeting.

Napo Proposal 1: Approval of the Agreement and Plan of Merger

At the Napo special stockholders meeting, holders of Napo common stock will be asked to approve the Agreement and Plan of Merger, dated March 31, 2017, by and among Jaguar Animal Health, Inc., Napo Acquisition Corporation, Napo Pharmaceuticals, Inc. and a Napo representative (sometimes referred to herein as the merger agreement). A copy of the merger agreement has been included as *Annex A* to this joint proxy statement/prospectus. In the merger, each issued and outstanding share of Napo common stock (other than dissenting shares and shares held by Jaguar or Napo) will be converted into a contingent right to receive shares of Jaguar common stock. Assuming the resale of the Tranche A Shares to third parties provides Nantucket with sufficient proceeds to satisfy the applicable Hurdle Amount, holders of Napo common stock will receive (x) shares of Jaguar

Table of Contents

common stock which in the aggregate represent up to approximately 21.5% of Jaguar's outstanding common stock and non-voting common stock on a fully diluted basis of Jaguar as of March 31, 2017 (which shares consist of a portion of the shares that Jaguar originally issued to Nantucket), assuming the exercise or conversion of all outstanding options and warrants other than those options and warrants exercisable or convertible for approximately 300,000 shares of Jaguar common stock with an exercise/conversion price of \$5.00 or more, and (y) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, additional shares of the Jaguar common stock (equal to 50% of the unsold Tranche A shares), which will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units. The terms of, reasons for and other aspects of the merger agreement and the merger are described in detail in the sections titled "The Merger Agreement" and "The Proposed Merger".

Required Vote of Stockholders

To adopt the merger agreement (this Proposal 1), holders of a majority of the shares of Napo common stock issued and outstanding and entitled to vote thereon must vote in favor of adoption of the merger agreement. Because approval is based on the affirmative vote of a majority of the outstanding shares of Napo common stock entitled to vote, a Napo stockholder's failure to vote in person or by proxy at the special meeting, or an abstention from voting, or the failure of a Napo stockholder who holds his or her shares in "street name" through a broker or other nominee to give voting instructions to such broker or other nominee, will have the same effect as a vote "**AGAINST**" adoption of the merger agreement.

Recommendation of the Napo Board

THE NAPO BOARD UNANIMOUSLY RECOMMENDS A VOTE "**FOR**" THE APPROVAL OF THE MERGER AGREEMENT.

THE MERGER IS CONDITIONED ON APPROVAL OF THIS PROPOSAL.

Proposal 2: Approval to Adjourn the Special Meeting if Necessary or Advisable to Permit Further Solicitation of Proxies in the Event There Are Not Sufficient Votes at the Time of the Special Meeting to Approve the Merger Agreement Described in Proposal 1

At the Napo special meeting, holders of Napo common stock will be asked to approve the adjournment of the special meeting if necessary or advisable to permit further solicitation of proxies in the event there are not sufficient votes at the time of the special meeting to approve the adoption of the merger agreement described in Proposal 1.

Required Vote of Stockholders

To approve the adjournment of the special meeting, if necessary or advisable to solicit additional proxies if there are not sufficient votes to adopt the merger agreement at the time of the special meeting (this Proposal 2), the affirmative vote of the holders of a majority of shares of Napo common stock, if a quorum is present, is required. The chairman of the meeting may also (regardless of the outcome of the stockholder vote on adjournment) adjourn the meeting to another place, date and time. If a quorum is not present, a majority of the voting stock represented in person or by proxy, or the chairman of the meeting, may adjourn the meeting until a quorum is present. Shares held by stockholders who are not present at the special meeting in person or by proxy will have no effect on the outcome of any vote to adjourn the special meeting. Broker non-votes and abstentions will have no effect on the outcome of any vote to adjourn the special meeting if a quorum is present but will have the same effect as a vote "**AGAINST**" if no quorum is present.

Table of Contents

Recommendation of the Napo Board

THE NAPO BOARD UNANIMOUSLY RECOMMENDS A VOTE "**FOR**" THE APPROVAL TO ADJOURN THE SPECIAL MEETING IF NECESSARY OR ADVISABLE TO PERMIT FURTHER SOLICITATION OF PROXIES IN THE EVENT THERE ARE NOT SUFFICIENT VOTES AT THE TIME OF THE SPECIAL MEETING TO APPROVE THE ADOPTION OF THE MERGER AGREEMENT DESCRIBED IN PROPOSAL 1.

Table of Contents

THE PROPOSED MERGER

The following is a discussion of the merger and the material terms of the merger agreement between Jaguar and Napo. You are urged to read carefully the merger agreement in its entirety, a copy of which is attached as Annex A to this joint proxy statement/prospectus and incorporated by reference herein.

General

Jaguar and Napo agreed to the acquisition of Napo by Jaguar through a merger under the terms of the merger agreement that is described in this joint proxy statement/prospectus. Under the terms of the merger agreement, Merger Sub will merge with and into Napo. As a result, Napo will survive the merger and will continue to exist as a wholly-owned subsidiary of Jaguar.

The Jaguar Board is using this joint proxy statement/prospectus to solicit proxies from the holders of Jaguar common stock for use at the Jaguar special meeting. The Napo Board is using this joint proxy statement/prospectus to solicit proxies from the holders of Napo common stock for use at the Napo special meeting. This joint proxy statement/prospectus also forms a part of the registration statement which will be used by Jaguar in connection with the offering of Jaguar common stock and non-voting common stock if the merger is completed.

Napo and Jaguar management view the planned merger of the two companies as an important step in the evolution of both entities and their efforts to develop drugs to advance the standard of care for gastrointestinal disease.

Jaguar Merger Proposal

At the Jaguar special meeting, holders of shares of Jaguar common stock will be asked to vote on (i) the issuance of shares of Jaguar common stock and non-voting common stock as contemplated by the merger agreement, (ii) the issuance of shares of Jaguar common stock upon conversion of the Convertible Promissory Notes, due December 30, 2019, (iii) the issuance of \$3,000,000 of Jaguar common stock at a price equal to \$0.925 per share to Invesco, pursuant to the Invesco Commitment Letter, (iv) the amendment of the 2014 Plan, and (v) the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 50 million shares to 225 million shares, authorize a class of non-voting common stock, require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and change the Jaguar corporate name to "Jaguar Health, Inc."

The merger will not be completed unless Jaguar stockholders approve proposals (i), (iv) and (v).

A separate vote by the holders of Jaguar common stock on the merger agreement or the merger itself is not required under Delaware law.

Napo Merger Proposal

At the Napo special meeting, holders of shares of Napo common stock will be asked to vote on, among other things, the adoption of the merger agreement and thereby approve the merger. **The merger will not be completed unless Napo stockholders adopt the merger agreement and thereby approve the merger.**

Merger Consideration

Common Stock and Non-Voting Common Stock

Subject to the terms and conditions of the merger agreement, at the effective time of the merger, (i) existing creditors of Napo will receive an aggregate of not more than 2,005,245 shares of Jaguar

Table of Contents

common stock and not more than 43,156,649 shares of Jaguar non-voting common stock in full satisfaction of all existing indebtedness then owed by Napo to such creditors and (ii) an existing Napo stockholder will be issued an aggregate of approximately 3,243,243 shares of Jaguar common stock in return for \$3 million of new funds invested into Jaguar by such investor. However, assuming the resale to third parties of the Tranche A Shares issued by Jaguar to Nantucket pursuant to the Napo debt settlement provides Nantucket with sufficient proceeds to meet the applicable Hurdle Amounts, former Napo stockholders will receive (x) shares of Jaguar common stock which in the aggregate represent up to 21.5% of Jaguar's outstanding common stock and non-voting common stock on a fully diluted basis of Jaguar as of March 31, 2017 (which shares consist of a portion of the shares that Jaguar originally issued to Nantucket), assuming the exercise or conversion of all outstanding options and warrants other than those options and warrants exercisable or convertible for approximately 300,000 shares of Jaguar common stock with an exercise/conversion price of \$5.00 or more and (y) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, additional shares of the Jaguar common stock (equal to 50% of the unsold Tranche A shares), which will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units.

Shares of Jaguar non-voting common stock are the same in all respects to shares of Jaguar's common stock, except that holders of shares of non-voting common stock are not entitled to vote on matters submitted to Jaguar stockholders other than a change of control of Jaguar, and shares of non-voting common stock are convertible into shares of common stock on a one-for-one basis (i) at the option of the respective holders thereof, at any time and from time to time on or after April 1, 2018 or (ii) automatically, without any payment of additional consideration by the holder thereof, (x) upon a transfer of such shares to any person or entity that is neither an affiliate of Nantucket nor an investment fund, investment vehicle or other account, that is, directly or indirectly, managed or advised by Nantucket or any of its affiliates pursuant to a sale of such stock to a third-party for cash in accordance with the terms and condition set forth in the Investor Rights Agreement, or (y) upon the release or transfer of such shares to the Napo Legacy Stockholders.

Jaguar will assume (i) each outstanding and unexercised option to purchase Napo common stock, which will be converted into options to purchase Jaguar common stock, (ii) each outstanding warrant to purchase Napo common stock, which will be converted into warrants to purchase Jaguar common stock, and (iii) each outstanding restricted stock unit to acquire Napo common stock, which will be converted into restricted stock units to acquire Jaguar common stock.

Based on the number of shares of Jaguar common stock issued and outstanding as of March 31, 2017, an aggregate of up to approximately 69,299,346 shares of Jaguar common stock and non-voting common stock will be issued upon the closing of the merger and the related Napo debt settlement, which will represent approximately 75% of the total Jaguar common stock and non-voting common stock issued and outstanding immediately following the merger. The aggregate number of shares of Jaguar common stock and non-voting common stock to be issued to the Napo Stakeholders will represent approximately 75% of the shares of Jaguar common stock and non-voting common stock issued and outstanding immediately after the merger. The amounts and percentages provided above are calculated based on a fully diluted basis of Jaguar as of March 31, 2017 assuming the exercise or conversion of all outstanding options and warrants other than those options and warrants exercisable or convertible for approximately 300,000 shares of Jaguar common stock with an exercise/conversion price of \$5.00 or more.

Fractional shares of Jaguar common stock will not be delivered pursuant to the merger. Instead, any fractional shares will be rounded down to the next whole number of shares.

The value of the consideration to be received by Napo stockholders will fluctuate with changes in the price of Jaguar common stock. Assuming the resale to third parties of the Tranche A Shares issued by Jaguar to Nantucket pursuant to the Napo debt settlement provides Nantucket with sufficient

Table of Contents

proceeds to meet the applicable Hurdle Amounts such that the Napo stockholders receive 100% of the Tranche B Shares and none of the Tranche A Shares, the estimated merger consideration is approximately \$[•] based on Jaguar's closing share price of \$[•] on [•], 2017. However, there can be no assurance that the Hurdle Amounts will be satisfied or that Napo stockholders will receive any shares of Jaguar common stock. See "Risk Factors Risks Related to the Merger The contingent rights that Napo stockholders are receiving in the merger may be exchanged for fewer shares of Jaguar stock than anticipated or none at all, depending on whether the resale of the Tranche A Shares to third parties provides Nantucket with sufficient proceeds to satisfy the applicable Hurdle Amount."

Adjustments

The merger consideration will be equitably adjusted to provide Napo creditors and Invesco with the same economic effect contemplated by the merger agreement if, at any time between the signing and the effective time of the merger, there is any change in the outstanding shares of capital stock of Napo or Jaguar by reason of any reclassification, recapitalization, split-up, combination, exchange of shares or similar readjustment within such period, or a stock dividend with a record date during such period.

Treasury Shares; Shares Owned by Jaguar

At the effective time of the merger, each share of Napo common stock (i) held as a treasury share by Napo or (ii) owned of record by Jaguar will, in each case, be cancelled, and no consideration will be delivered in exchange for those shares.

Background of the Merger

Historical Background

Napo formed Jaguar to develop and commercialize animal health products. Effective as of December 31, 2013, Jaguar was a wholly-owned subsidiary of Napo, and until Jaguar's initial public offering in May 2015, Jaguar was a majority-owned subsidiary of Napo.

Jaguar has been operating at a net loss since inception, based upon a business plan that anticipated raising additional funds through debt or equity financing to operate beyond the second quarter of 2017. Due to current market conditions, Jaguar's current liquidity position and its depressed stock price, Jaguar came to believe it would be challenging to obtain sufficient/adequate equity or debt financing on acceptable terms, if at all to pursue its business as desired. As a result, Jaguar's board of directors began discussing and evaluating its strategic opportunities to enhance stockholder value beginning in the second half of 2015. Jaguar's management provided Jaguar's board of directors with management's preliminary assessment of a variety of strategic alternatives that Jaguar could pursue to enhance stockholder value, including engaging in a merger transaction. After the acquisition of Salix Pharmaceuticals, Ltd., or Salix, by Valeant Pharmaceuticals International Inc., or Valeant, in 2015, Napo was engaged in discussions with Valeant to terminate the license agreement for Mytesi between Salix and Napo. The Jaguar Board saw this as an opportunity for Jaguar to acquire all rights for crofelemer, and own the harvest and extract production at a scale that would never be achievable with just animal health products.

Jaguar Strategic Alternatives and Significant Corporate Events

Throughout the second half of 2015, members of the Jaguar Board and management, as part of their review of strategic alternatives, met, in person or by telephone, including in some such meetings with representatives from different financial institutions, and engaged in discussions regarding opportunities for Jaguar to find suitable partners or evaluate the potential of a merger with Napo.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Between January and April 2016, Jaguar management discussed, including in some such discussions with a representative of an investment bank, potential plans for future expansion and fund raising.

On April 1, 2016, the Jaguar Board discussed with a representative of one of the investment banks the relative values of the two companies. The Jaguar Board decided that it needed an independent M&A Committee to explore a merger with Napo. Given her executive management position at both Jaguar and Napo, Ms. Conte recused herself from direct negotiations on behalf of both Jaguar and Napo.

The Jaguar Board established an independent M&A Board Committee, initially comprising of Mr. Kamphuis, as chairman, and Mr. Micek, and subsequently Dr. Azhir after she joined the board in December 2016, to evaluate a potential merger with Napo. Following April 1, 2016, the Jaguar Board decided to engage Stifel to act as its financial advisor in connection with the Jaguar Board's analysis of a potential transaction with Napo, and signed an engagement letter with Stifel as of January 19, 2017.

Between April 1 and April 11, 2016, Jaguar's M&A Committee convened several times to discuss the relative valuation of the two companies, the underlying sales forecasts and performed initial due diligence steps to confirm assumptions in the valuation model.

On April 12, 2016, Jaguar's M&A Committee convened to finalize the recommendation to the Jaguar Board. The Jaguar Board approved the non-binding offer letter to be sent to Napo detailing the terms and conditions and due diligence requirements. The Jaguar Board approved the recommendation and offer letter, which was sent to the Napo Board that same day.

Between April 12 and 26, 2016, the Jaguar M&A Committee continued their due diligence as well as answering due diligence questions from the Napo Special M&A Committee, with regards to the assumptions used in the Jaguar M&A Committee's model, which impacted the Jaguar M&A Committee's valuation significantly and providing further detail on the Jaguar business plan and R&D projects, both written and in discussions by phone.

On April 26, 2016, the Jaguar Board received a counter offer from Napo, which was supported by new information about Napo's progress in negotiating a licensing deal for their lead product. The counter offer showed that the respective Boards differed in their views.

Between April 26 and May 5, 2016, the Jaguar M&A Committee worked to understand the differences and discussed with the Napo M&A Committee the underlying assumptions and the respective business plans of the companies to come to an agreeable valuation that both committees would feel comfortable to recommend to their Boards. As part of the due diligence, both companies presented more detail in management presentations to the full Boards of the respective companies.

On May 4, 2016, the Jaguar M&A Committee met to prepare an updated offer proposal for the Jaguar Board. The proposal was presented at the board meeting the next day and rejected by the Jaguar Board. The Jaguar Board was concerned with the ownership ratio and Napo's ability to meet the debt free requirement.

In the days between May 5 and May 10, there was continued dialogue and Napo was asked to provide significantly more detail about the negotiations with potential partners and their views on how to fund the development of new indications for crofelemer use in humans. The information was used to further fine tune the evaluation model and resulting relative values.

The full Jaguar Board met on May 9, 2016, to discuss the new and updated information and the proposed offer as recommended by the Jaguar M&A Committee. The Jaguar Board approved the recommendation and offer. The offer letter reflecting the Jaguar Board's decision was sent to Napo on May 10.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

The Chairpersons of the respective M&A Committees met on May 12, 2016, in New York to discuss the latest offer made by Jaguar and the conditions of the offer, and Jaguar received initial feedback from the Napo Board on the offer of May 10.

Between May 12 and August 5, 2016, the Jaguar M&A Committee had several interactions with the Napo Board, as they worked with the Napo management to do a licensing deal and negotiate with the debt holders to find solutions to meet the Jaguar requirement that Napo be debt free for the merger to be completed.

On August 5, 2016, the Jaguar M&A Committee discussed the deal terms that Napo had negotiated with a potential partner for Mytesi in the U.S. The deal was different from what was presented in May and the Jaguar M&A Committee reviewed the new terms and discussed with Stifel the potential impact of the new terms on relative potential values of Jaguar and Napo. Napo provided no update on their efforts to restructure the debt, and the Jaguar M&A Committee decided to wait until those terms would be available before discussing value again with Napo.

On August 8, 2016, the Jaguar M&A Committee engaged in further discussion with the assistance of Stifel on the financial aspects of the deal terms Napo negotiated with the potential partner. The Jaguar M&A Committee identified further details needed to complete the analysis, and data was requested from Napo.

On August 12, 2016, the Jaguar M&A Committee updated the full Jaguar Board at the scheduled board meeting and explained that Napo was working independently on restructuring their debt and that further action would be needed before Jaguar would receive confirmation that Napo could meet the debt free requirement for Jaguar's offer.

On September 15, 2016, the Jaguar Board had a teleconference in which the terms and conditions of the potential merger were extensively discussed, and the Jaguar Board asked the Jaguar M&A Committee Chairman to reach out and discuss with the Napo team the details of Napo's debt restructuring, and assuming adequate progress was made on such restructuring, Jaguar's plans to send an updated offer letter the following week.

On September 21, 2016, Jaguar sent an updated offer letter to the Napo Board.

On November 22, 2016, the Jaguar M&A Committee had a meeting to discuss a request from Napo to join a negotiation between Napo management and Napo's Board and representatives of the investment adviser to Nantucket. The Jaguar M&A Committee decided to attend, but limit its contribution to what was already in the latest offer letter sent to the Napo Board and not take part in any negotiation.

Between November 23 and December 1, 2016, the Jaguar M&A Committee had discussions with Napo management and the Napo Board to understand the debt restructuring deal Napo was negotiating with Nantucket and reviewed the impact of the terms of the debt restructuring on the Jaguar's Board ability to effectively manage Jaguar post-merger, raise money and create shareholder value.

On December 2, 2016, the independent members of the Jaguar M&A Committee and the Chairman of the Jaguar Board participated as observers, by telephone, in a negotiation session between Napo and representatives of the investment adviser to Nantucket.

On December 12, 2016, the Jaguar M&A Committee held a teleconference to discuss the draft term sheet between Napo and Nantucket as provided by Napo.

Table of Contents

On December 15, 2016, at the request of Nantucket, the Chairman of the Jaguar Board and the Jaguar M&A Committee had a call with representatives of the investment adviser to Nantucket, in which the Jaguar Board was asked to make concessions with regards to the Jaguar equity that Nantucket would receive as part of the debt restructuring. The Jaguar Board members unanimously turned down the request and maintained the position that the Jaguar stock received by Nantucket would not have preferential rights.

On January 12, 2017, the Jaguar M&A Committee met to discuss the potential transaction and, as part of that meeting, discussed with representatives of Stifel potential methodology for assessing the relative values of Jaguar and Napo. Afterwards, Jaguar and Napo agreed to exchange additional information on their respective business plans and other financial data.

On January 17, 2017, Jaguar received a counter offer from Napo, detailing the final agreed terms of the debt restructuring. Under the final terms of the debt structuring, a substantial portion of the Nantucket secured debt would be settled with Jaguar common stock plus \$8 million in cash paid to Nantucket. The Jaguar M&A Committee met on the same day to discuss the offer and voted unanimously to recommend approval of the counter offer to the Jaguar Board.

On January 18, 2017, the Jaguar Board met to discuss the Jaguar M&A Committee's recommendation and the Jaguar Board voted unanimously to approve the recommendation to accept the Napo counter offer.

On January 30, 2017, the full Jaguar Board met to discuss the final binding merger terms, address outstanding issues regarding the Napo debt restructuring agreements.

On February 7, 2017, the Jaguar M&A Committee met to review the final binding term sheet and prepare its recommendation for the Jaguar Board. The Jaguar Board reviewed and approved the proposed binding agreement of terms to merge.

On February 8, 2017, Jaguar and Napo entered into the binding agreement of terms to merge. The transaction was approved by the unanimous vote of independent and disinterested members of each of Jaguar's and Napo's Board of Directors. The binding financial terms of the merger include a 3-to-1 Napo-to-Jaguar value ratio to calculate the relative ownership of the combined entity.

On March 28, 2017, Jaguar's board of directors held a meeting that representatives of Reed Smith LLP and Stifel attended at the invitation of Jaguar's board of directors. During the meeting, members of Jaguar's management reviewed the key features of the proposed business combination between Jaguar and Napo, including: structure and timing considerations and the relative percentages of ownership of the existing Jaguar stockholders, on the one hand, and the Napo stockholders (including investors in Napo's planned concurrent financing), on the other hand, following the completion of the merger; the planned concurrent financing of Napo; the terms of support agreements from certain Napo directors, officers, stockholders and affiliates, as well as Jaguar directors, officers and affiliates, to vote in favor of the proposed business combination; the closing conditions in the merger agreement as well as the settlement agreement and investor rights agreement for Napo's planned concurrent financing; and the termination provisions set forth in the merger agreement. In addition, representatives of Stifel reviewed with Jaguar's Board Stifel's financial analysis of the consideration proposed to be paid by Jaguar in the transaction, during which members of Jaguar's Board asked questions and discussed the results of different valuation analyses performed. Representatives of Stifel then delivered to the board an oral opinion, subsequently confirmed in writing by delivery of a written opinion dated March 28, 2016, that, as of that date and based upon and subject to the various limitations, matters, qualifications and assumptions set forth therein, the transaction consideration (as described in the opinion) to be issued by Jaguar in the transaction (as described in the opinion) was fair to Jaguar from a financial point of view. For more information about Stifel's opinion, see "The Proposed Merger Opinion of Jaguar Financial Advisor" beginning on page 234 and

Table of Contents

Annex C to this joint proxy statement/prospectus. Representatives from Reed Smith reviewed with Jaguar's Board the fiduciary duties of the board members in the context of the proposed business combination. During the various discussions, Jaguar's Board asked questions and discussed the terms and features of the proposed business combination, including provisions of the proposed merger agreement and related documentation. After further discussion among Jaguar's directors, Jaguar's Board unanimously (i) determined that the merger and the other transactions contemplated by the merger agreement were fair to and in the best interests of Jaguar and its stockholders, (ii) approved and adopted the merger agreement and the transactions contemplated thereby, subject to finalization of the merger agreement and ancillary documents by Jaguar's management in consultation with Jaguar's legal counsel, with such changes thereto as Jaguar's management deems to be in the best interests of Jaguar and its stockholders, (iii) resolved to recommend that the Jaguar stockholders vote to approve the merger, adopt the merger agreement and approve and/or adopt the other transactions and arrangements as contemplated by the merger agreement, including the issuance of shares of Jaguar common stock and contingent rights to receive shares of Jaguar common stock in the merger and (iv) approved the Note Purchase Agreement and to make the 2017 Exchangeable Notes exchangeable into shares of Jaguar common stock in connection with the merger and pursuant to the terms of the form of 2017 Exchangeable Note that had been distributed for review in advance of the meeting.

On March 31, 2017, members of the Jaguar and Napo management teams met, together with representatives of Reed Smith LLP, Jaguar's legal counsel, and Boies, Schiller & Flexner LLP, Napo's legal counsel, to finalize the merger agreement and related transaction documents. After finalization, Jaguar and Napo entered into the merger agreement and related transaction documents.

Recommendation of the Jaguar Board and its Reasons for the Merger

The Jaguar Board's decision to approve the merger and the merger agreement and to recommend to Jaguar's stockholders that they vote for the adoption of the merger agreement was based on a number of factors. The following are all of the material factors considered by the Jaguar Board (which were thoroughly discussed by the Jaguar Board with its outside advisors and members of Jaguar senior management):

Jaguar believes the planned merger will allow Jaguar to generate revenue from sales of crotelemer, under the brand name Mytesi, Napo's FDA approved drug product for the symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy;

Jaguar management believes Jaguar will benefit from the synergies and economies of scale that a merger should create in manufacturing and commercialization of crotelemer for various human and animal indications. The products and product candidates of both companies products are linked by a common mechanism of action that is highly conserved across all animals and has the potential to change the standard of care for watery diarrhea and dehydration to which it can lead;

Napo's technology for proprietary gastrointestinal disease products is central to Jaguar as well as Napo;

Jaguar's management believes that the commercial readiness that Napo's team would bring to a combined entity would prove beneficial for Jaguar as it prepares for the launch of its first prescription products Canalevia for canine diarrhea, and Equilevia for equine gastric ulcers if approved;

The formulation of Mytesi, Napo's FDA approved human prescription drug, is the formulation of Canalevia, Jaguar's lead crotelemer-based drug product candidate, which is under investigation for both acute diarrhea and chemotherapy-induced diarrhea in dogs. This mitigates the risk related to the Chemistry, Manufacturing and Controls section of Jaguar's New Animal

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Drug Application for Canalevia, and provides Jaguar with forward-integrated quality and supply chain readiness;

Canalevia is the subject of a recently announced development and co-promotion deal between Jaguar and Elanco US Inc. Jaguar believes this collaboration was aided by the commercially active supply chain Napo has in place that Jaguar can access, and that the Elanco deal foreshadows the type of portfolio management that is key to Jaguar's future development and that of the merged company;

Jaguar expects the merger would play a significant and positive role in supporting the development of crofelemer to address the problem of chemotherapy-induced diarrhea in companion animals;

Jaguar believes that both companies will benefit from the efficiencies of combining the skillsets of the highly complementary Napo and Jaguar teams;

Jaguar believes both company's commercialization efforts will benefit from common messaging and the resulting brand awareness;

Jaguar believes that the global unencumbered rights to Mytesi and a host of crofelemer-based human products, combined with horizontal product leverage to multiple animal species, will provide the combined company with a strong foundation for collaborations;

Jaguar and Napo have a well-established history together; Napo was originally founded to focus on development and commercialization of human therapies derived from plants used traditionally in rainforest areas. In 2013, Napo formed Jaguar and licensed to Jaguar the exclusive worldwide rights for all veterinary applications to Crofelemer and all Napo technology; and

Jaguar believes that the weaving of clinical indications between humans and animals that a merger will support will provide learning, modeling, and efficiencies in both directions.

In addition to the above factors, the Jaguar Board also identified and considered the following material uncertainties, risks and other potentially negative factors in its consideration of the merger and the merger agreement:

the historical poor financial performance of Napo which could continue after the completion of the merger, which was balanced by the fact that Napo has settled its litigation with Salix and will settle its debt obligations to Nantucket;

the challenges and costs of combining the two businesses and the risks of completing the integration, which could harm the combined company's operating results and preclude the realization of anticipated synergies or benefits from the merger;

the potential for diversion of management and employee attention from other strategic priorities and for increased employee attrition both before and after the closing of the merger agreement, and the potential adverse effect on the business and relations of Jaguar with customers and suppliers;

the dilution to current Jaguar stockholders from the issuance of additional shares of Jaguar common stock in connection with the merger and the other transactions contemplated by the merger agreement, which could result in a decline in the price of Jaguar common stock;

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

the termination fee of 2,000,000 shares of Jaguar common stock, issuable by Jaguar to Napo upon the occurrence of certain events;

Table of Contents

the substantial costs associated with completing the merger, including the costs of integrating business of Jaguar and Napo, which could have an adverse effect on the combined company's future results of operations;

the potential risk that the merger would not be completed in a timely manner or at all; and

the potential risks listed in the "Risk Factors" section above.

The Jaguar Board weighed these positive and negative factors, realizing that future results are uncertain, including any future results considered or expected in the factors noted above. In addition, many of the nonfinancial factors considered were highly subjective. As a result, in view of the number and variety of factors they considered, the Jaguar Board did not consider it practicable and did not attempt to quantify or otherwise assign relative weights to the specific factors it considered. Rather, the Jaguar Board made its determination based on the totality of the information it considered. Individually, each director may have given greater or lesser weight to a particular factor or consideration.

In addition, the Jaguar Board did not undertake to make any specific determination as to whether any particular factor, or any aspect of any particular factor, was favorable or unfavorable to its ultimate determination, but rather conducted an overall analysis of the factors described above, including discussions with Jaguar's management team and Jaguar's outside legal and financial advisors. Based on the totality of the information presented, the Jaguar Board determined that Jaguar should proceed with the merger and the merger agreement, and recommends that the Jaguar stockholders approve the issuance of common stock and non-voting common stock and the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation.

The Jaguar Board believes that, overall, the potential benefits of the merger to Jaguar and its stockholders outweighs the risks mentioned above.

The foregoing discussion of the information and factors considered by the Jaguar Board is forward-looking in nature. This information should be read in light of the factors described under the section entitled "Cautionary Statement Regarding Forward-Looking Statements" beginning on page 85.

Recommendation of the Napo Board and its Reasons for the Merger

The Napo Board's decision to approve the merger and the merger agreement and to recommend to Napo's stockholders that they vote for the adoption of the merger agreement was based on a number of factors. The following are all of the material factors considered by the Napo Board:

Napo management believes Napo will benefit from the synergies and economies of scale that a merger should create in manufacturing and commercialization of crofelemer for various human and animal indications. The products and product candidates of both companies products are linked by a common mechanism of action that is highly conserved across all animals and has the potential to change the standard of care for watery diarrhea and the devastating dehydration to which it can lead;

Napo expects that the merger would play a significant and positive role in supporting the development of crofelemer to address the problem of chemotherapy-induced diarrhea in humans;

Napo believes that a merger will enable both companies, through a joint management team, to enhance the potential value creation for stockholders;

Napo believes that the global unencumbered rights to Mytesi and a host of crofelemer-based human products, combined with horizontal product leverage to multiple animal species, will provide the combined company with a strong foundation for collaborations;

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Napo believes that both companies will benefit from the efficiencies of combining the skillsets of the highly complementary Napo and Jaguar teams;

Napo believes both companies' commercialization efforts will benefit from common messaging and the resulting brand awareness;

Jaguar and Napo have a well-established history together; Napo was originally founded to focus on development and commercialization of human therapies derived from plants used traditionally in rainforest areas. In 2013, Napo formed Jaguar and licensed to Jaguar the exclusive worldwide rights for all veterinary applications to Crofelemer and all Napo technology; and

Napo believes that the weaving of clinical indications between humans and animals that a merger will support will provide learning, modeling, and efficiencies in both directions.

In addition to the above factors, the Napo Board also identified and considered a number of uncertainties, risks and other potentially negative factors in its consideration of the merger and the merger agreement, including the following:

the fact that the merger may not be completed in a timely manner or at all and the potential adverse effect of the public announcement of the merger on the ability of Napo to obtain financing in the future in the event the merger is not completed;

the risks and costs to Napo if the merger is not completed, including the diversion of management and employee attention, potential employee attrition and the potential damaging effects on Napo's business and relations with customers, suppliers and vendors;

the transaction costs to be incurred in connection with the merger will be quite significant, which could impact results of performance;

the restrictions on the conduct of Napo's business prior to completion of the merger, which could delay or prevent Napo from undertaking material strategic opportunities that might arise pending completion of the merger to the detriment of Napo's stockholders and the potential duration of the period between signing and closing; and

the fact that the merger consideration consists solely of a contingent right to receive stock, which could result in the Napo stockholders receiving fewer shares of Jaguar common stock than expected or none at all and being adversely affected by a decrease in the trading price of Jaguar common stock after the date of execution of the merger agreement, which is a risk due to the public reporting requirements of Jaguar.

The Napo Board weighed these positive and negative factors, realizing that future results are uncertain, including any future results considered or expected in the factors noted above. In addition, many of the nonfinancial factors considered were highly subjective. As a result, in view of the number and variety of factors they considered, the Napo Board did not consider it practicable and did not attempt to quantify or otherwise assign relative weights to the specific factors it considered. Rather, the Napo Board made its determination based on the totality of the information it considered. Individually, each director may have given greater or lesser weight to a particular factor or consideration.

The Napo Board believed that, overall, the potential benefits identified above of the merger to Napo and its stockholders outweighed the risks considered by the Napo Board mentioned above.

The foregoing discussion of the information and factors considered by the Napo Board is forward-looking in nature. This information should be read in light of the factors described under the section entitled "Cautionary Statement Regarding Forward-Looking Statements"

beginning on page 85.

Table of Contents

Opinion of Jaguar Financial Advisor

Jaguar engaged Stifel to act as its financial advisor in connection with Jaguar's analysis of a merger, acquisition, joint venture, minority investment or other similar transaction with Napo. On March 28, 2017, Stifel delivered to the Jaguar Board an oral opinion, subsequently confirmed in writing by delivery of a written opinion dated March 28, 2017 (the "Opinion"), that, as of that date and based upon and subject to the various limitations, matters, qualifications and assumptions set forth therein, the Transaction Consideration (as defined below) to be issued by Jaguar in the Transaction (as defined below) was fair to Jaguar, from a financial point of view.

For purposes of its analyses and Opinion, Stifel was advised by Jaguar's management that, pursuant to the Merger Agreement and certain related agreements, Jaguar will acquire all of the issued and outstanding equity interests of Napo, and certain debt and liabilities of Napo will be restructured, in the merger and certain related transactions (collectively, and as described more fully in the Opinion, the "Transaction"), and that the number of shares of Jaguar common stock and Jaguar non-voting common stock to be issued or potentially issued by Jaguar in the Transaction, including, without limitation, shares issuable upon conversion of convertible notes and upon any exercise of or otherwise pursuant to Jaguar warrants, RSUs and options issued in the Transaction, will total, in the aggregate, 69,299,346 shares of Jaguar common stock and Jaguar non-voting common stock (such number of shares, the "Transaction Consideration").

Jaguar did not impose any limitations on Stifel with respect to the investigations made or procedures followed in rendering its Opinion. In selecting Stifel, Jaguar's Board considered, among other things, the fact that Stifel is a reputable investment banking firm with substantial experience advising companies in the healthcare and biopharmaceutical sectors and in providing strategic advisory services in general. Stifel, as part of its investment banking business, is regularly engaged in the independent valuation of businesses and securities in connection with mergers, acquisitions, underwritings, sales and distributions of listed and unlisted securities, private placements and valuations for estate, corporate and other purposes. In the ordinary course of business, Stifel and its clients may transact in the equity securities of each of Jaguar and Napo and may at any time hold a long or short position in such securities.

The full text of the written Opinion that Stifel delivered to the Jaguar Board is attached to this registration statement as *Annex C* and is incorporated into this document by reference. The summary of Stifel's Opinion set forth in this registration statement is qualified in its entirety by reference to the full text of the Opinion. Jaguar stockholders are urged to read the Opinion carefully and in its entirety for a discussion of the assumptions made, procedures followed, matters considered and limits of the review undertaken by Stifel in connection with such Opinion.

Stifel's Opinion was for the information of, and directed to the Jaguar Board for its information and assistance in connection with its consideration of the financial terms of the Transaction. Stifel's Opinion did not constitute a recommendation to the Jaguar Board as to how the Jaguar Board should vote or otherwise act with respect to the Transaction or any other matter, or to any stockholder of Jaguar or Napo as to how any such stockholder should vote or act with respect to the Transaction or any other matter, including whether or not any stockholder of Jaguar or Napo should exercise any dissenters', appraisal or similar rights that may be available to such stockholder. In addition, Stifel's Opinion did not compare the relative merits of the Transaction with any other alternative transactions or business strategies which may have been available to Jaguar and did not address the underlying business decision of the Jaguar Board or Jaguar to proceed with or effect the Transaction.

In connection with its Opinion, Stifel, among other things:

reviewed the financial terms contained in a draft received on March 28, 2017 of the merger agreement;

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

reviewed certain publicly available information and data concerning Jaguar, including audited consolidated financial statements of Jaguar contained in its Annual Reports on Form 10-K for the three years ended December 31, 2016 and certain relevant historical financial and operating data concerning Jaguar furnished to Stifel by the management of Jaguar;

reviewed certain non-publicly available financial analyses, financial projections, reports and other information concerning Jaguar furnished to Stifel by the management of Jaguar, including projections for Jaguar reflecting the probability of technical success determined by the management of Jaguar (the "Jaguar Projections"), and utilized per instruction of Jaguar;

reviewed certain publicly available information and data concerning Napo and certain non-publicly available information and data concerning Napo furnished to Stifel by the management of Jaguar, including audited consolidated financial statements of Napo for the year ended December 31, 2016, and certain financial analyses, financial projections, reports and other information concerning Napo furnished to Stifel by the management of Jaguar, including projections for Napo reflecting the probability of technical success determined by the management of Jaguar (the "Napo Projections"), and utilized per instruction of Jaguar;

reviewed pro-forma projections for Jaguar and Napo giving effect to the Transaction and reflecting the probabilities of technical success determined by the management of Jaguar (the "Pro Forma Projections"), provided by the management of Jaguar;

reviewed a pro forma balance sheet of Jaguar and Napo giving effect to the Transaction (the "Pro Forma Balance Sheet"), provided by the management of Jaguar;

discussed with the management of Jaguar the historical and current business operations, financial condition and prospects of each of Jaguar and Napo and such other matters as Stifel deemed relevant;

held discussions with the management of Jaguar regarding the potential effects of the Transaction, including the pro forma financial impact of the Merger on Jaguar and Napo;

reviewed and analyzed certain operating results and projections of each of Jaguar and Napo as compared to operating results, projections, reported prices and trading histories of certain publicly traded companies that Stifel deemed relevant;

reviewed and analyzed certain financial terms of the Transaction as compared to the publicly available financial terms of certain selected merger and acquisition transactions that Stifel deemed relevant to its analysis;

reviewed and analyzed, based on the Jaguar Projections, the cash flows generated by Jaguar on a stand-alone basis to determine the present value of the discounted cash flows;

reviewed and analyzed, based on the Napo Projections, the cash flows generated by Napo on a stand-alone basis to determine the present value of the discounted cash flows; and

reviewed and analyzed such other information and such other factors, and conducted such other financial studies, analyses and investigations, as Stifel deemed relevant for the purposes of our opinion. In addition, Stifel took into account its assessment of general economic, market and financial conditions and its experience in other transactions, as well as its experience in securities valuations and its general knowledge of the industry in which both Jaguar and Napo operate.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

In rendering its Opinion, Stifel, with the Jaguar Board's consent, relied upon and assumed, without independent verification, the accuracy and completeness of all of the financial and other information that was provided to Stifel by or on behalf of Jaguar, or that was otherwise reviewed by Stifel, and Stifel did not assume any responsibility for independently verifying any of such information. With respect to the financial forecasts and projections supplied to Stifel by Jaguar (including, without

Table of Contents

limitation, the Jaguar Projections, the Napo Projections and the Pro Forma Projections), Stifel assumed, at the direction of Jaguar, that they were reasonably prepared on the basis reflecting the best currently available estimates and judgments of the management of Jaguar as to the future operating and financial performance of Jaguar and Napo, as applicable, and that they provided a reasonable basis upon which Stifel could form its Opinion. Such forecasts and projections were not prepared with the expectation of public disclosure. All such forecasts and projections were based on numerous variables and assumptions that are inherently uncertain, including, without limitation, factors related to general economic and competitive conditions. Accordingly, actual results could vary significantly from those set forth in such forecasts and projections. Stifel relied on these forecasts and projections without independent verification or analysis and did not in any respect assume any responsibility for the accuracy or completeness thereof. Stifel expressed no opinion as to the Jaguar Projections, the Napo Projections, the Pro Forma Projections or any other estimates, forecasts or projections or the assumptions on which they were made. With respect to the Pro Forma Balance Sheet, Stifel assumed, at the direction of Jaguar, that it accurately reflected the pro forma combined balance sheet of Jaguar and Napo immediately after the closing of the Transaction. Stifel assumed, at the direction of Jaguar, that the Transaction Consideration consists of 69,299,346 shares, in the aggregate, of Jaguar common stock and Jaguar non-voting common stock (including, without limitation, shares of Jaguar common stock and Jaguar non-voting common stock issuable in respect of contingent rights and upon conversion of convertible notes), that any portion of the Transaction Consideration attributable to convertible notes will be converted into Jaguar common stock at or immediately following the closing date of the merger. Stifel further assumed, at the direction of Jaguar, that each share of Jaguar non-voting common stock has the same value as a share of Jaguar common stock.

Stifel also assumed that there were no material changes in the assets, liabilities, financial condition, results of operations, business or prospects of either Jaguar or Napo since the date of the last financial statements of Jaguar and Napo made available to Stifel. Stifel did not make or obtain any independent evaluation, appraisal or physical inspection of either Jaguar's or Napo's assets or liabilities (contingent or otherwise), nor had Stifel been furnished with any such evaluation or appraisal. Estimates of values of companies and assets do not purport to be appraisals or necessarily reflect the prices at which companies or assets may actually be sold. Because such estimates are inherently subject to uncertainty, Stifel assumed no responsibility for their accuracy.

Stifel assumed, with the Jaguar Board's consent, that there were no factors that would delay or subject to any adverse conditions any necessary regulatory or governmental approvals, consents, releases and waivers and that all conditions to the Transaction would be satisfied and not waived. In addition, Stifel assumed that the definitive Merger Agreement would not differ materially from the draft Stifel reviewed. Stifel also assumed that the Transaction would be consummated substantially on the terms and conditions described in the merger agreement and by the management of Jaguar, without any waiver or modification of any material term or condition by Jaguar or any other party and without any adjustment to the Transaction Consideration, and that obtaining any necessary regulatory or other approvals, consents, releases and waivers or satisfying any other conditions for consummation of the Transaction would not have an adverse effect on Jaguar, Napo or the Transaction. Stifel also assumed, in all respects material to its Opinion, that the representations and warranties of Jaguar, Napo and other parties contained in the Merger Agreement are true and correct and that all such parties would comply with each of their covenants in the Merger Agreement. Stifel assumed that the Transaction would be consummated in a manner that complies with the applicable provisions of the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, and all other applicable federal, state and foreign statutes, rules and regulations. Stifel further assumed that Jaguar has relied upon the advice of its counsel, independent accountants and other advisors (other than Stifel) as to all legal, financial reporting, tax, accounting and regulatory matters with respect to Jaguar, Napo, the Transaction, and the merger agreement.

Table of Contents

Stifel's Opinion was limited to whether, as of the date of the Opinion, the Transaction Consideration to be issued by Jaguar in the Transaction was fair to Jaguar, from a financial point of view, and did not address any other terms, aspects or implications of the Transaction, including, without limitation, the form or structure of the Merger or any other part of the Transaction, any individual transaction or group of transactions, or the terms, conditions or any other aspect of any individual transaction or group of transactions, that is or are part of the Transaction, any consequences of the Transaction on Jaguar, its stockholders, creditors or otherwise, or any terms, aspects or implications of any voting, support, stockholder or other agreements, arrangements or understandings contemplated or entered into in connection with the Transaction or otherwise, including without limitation any terms or conditions of any of the agreements relating to the issuance or potential issuance of shares included in the Transaction Consideration. Stifel's Opinion also did not consider, address or include: (i) any other strategic alternatives currently (or which have been or may be) contemplated by the Board or Jaguar; (ii) the legal, financial reporting, tax, accounting or regulatory consequences of the Transaction on Jaguar or the holders of Jaguar common stock; (iii) the fairness of the amount or nature of any compensation to any of Jaguar's officers, directors or employees, or class of such persons, relative to the compensation to the holders of Jaguar's securities or otherwise; or (iv) the effect of the Transaction on, or the fairness of the consideration to be received by, holders of any class of securities of Jaguar, or any class of securities of any other party to the Transaction. Furthermore, Stifel did not express any opinion as to the prices, trading range or volume at which Jaguar's securities will trade following public announcement or consummation of the Transaction.

Stifel's Opinion was necessarily based on economic, market, financial and other conditions as they existed on, and on the information made available to Stifel by or on behalf of Jaguar or its advisors, or information otherwise reviewed by Stifel, as of the date of its Opinion. It is understood that subsequent developments may affect the conclusion reached in its Opinion and that Stifel does not have any obligation to update, revise or reaffirm its Opinion. Stifel's Opinion is not a solvency opinion and does not in any way address the solvency or financial condition of Jaguar or Napo. Stifel's Opinion was approved by its fairness committee.

In accordance with customary investment banking practice, Stifel employed generally accepted valuation methods and financial analyses in reaching its Opinion. The following is a brief summary of the material financial analyses performed by Stifel in arriving at its Opinion. These summaries of financial analyses alone do not constitute a complete description of the financial analyses Stifel employed in reaching its conclusions. None of the analyses performed by Stifel were assigned a greater significance by Stifel than any other, nor does the order of analyses described represent relative importance or weight given to those analyses by Stifel. The financial analyses summarized below include information presented in tabular format. In order to fully understand the financial analyses used by Stifel, the tables must be read together with the text of each summary. The tables alone do not constitute a complete description of the financial analyses. The summary text describing each financial analysis does not constitute a complete description of Stifel's financial analyses, including the methodologies and assumptions underlying the analyses, and if viewed in isolation could create a misleading or incomplete view of the financial analyses performed by Stifel. The summary text set forth below does not represent and should not be viewed by anyone as constituting conclusions reached by Stifel with respect to any of the analyses performed by it in connection with its Opinion. Rather, Stifel made its determination as to the fairness, from a financial point of view, to Jaguar of the Transaction Consideration to be issued in the Transaction pursuant to the merger agreement on the basis of its experience and professional judgment after considering the results of all of the analyses performed.

Except as otherwise noted, the information utilized by Stifel in its analyses, to the extent based on market data, was based on market data as it existed on or before March 27, 2017 and is not necessarily indicative of current market conditions. The analyses described below do not purport to be indicative of actual future results, or to reflect the prices at which any securities may trade in the public markets,

Table of Contents

which may vary depending upon various factors, including changes in interest rates, dividend rates, market conditions, economic conditions and other factors that influence the price of securities.

Stifel was informed by Jaguar management that the number of shares of Jaguar common stock and Jaguar non-voting common stock comprising the Transaction Consideration (including those shares potentially issuable pursuant to options and warrants) would (i) be equal to 3.00 times the number of Jaguar shares outstanding or potentially issuable (including those shares potentially issuable pursuant to all outstanding warrants, RSUs and options for Jaguar common stock, excluding 50% of such options and warrants with exercise or conversion prices of \$5.00 or more), and (ii) accordingly represent 75% of the sum of the number of shares of Jaguar common stock and non-voting common stock comprising the Transaction Consideration plus the number of Jaguar shares outstanding or potentially issuable, in each case as described above.

Based on a treasury stock dilution calculation, taking into consideration the strike or exercise prices of the Jaguar dilutive securities to be issued in connection with the Transaction and the strike or exercise prices of the outstanding Jaguar dilutive securities, as provided by Jaguar management, and the closing price of Jaguar common stock on March 27, 2017, Stifel calculated that the number of diluted shares comprising the Transaction Consideration (including those shares potentially issuable pursuant to options and warrants) would (i) be equal to 4.44 times the number of diluted Jaguar shares and (ii) accordingly represent 82% of the sum of the number of shares of Jaguar common stock and non-voting common stock comprising the Transaction Consideration plus the number of diluted Jaguar shares, in each case calculated as described above.

Stifel conducted an analysis of the ratios of the pre-Transaction stand-alone equity value of Napo relative to the pre-Transaction stand-alone equity value of Jaguar, in each case as implied by valuation analyses conducted by Stifel and described below. In conducting its analysis, Stifel used three primary methodologies: selected publicly traded companies analysis; selected precedent transactions analysis; and discounted cash flow (referred to as DCF) analysis. Each of these valuation analyses yielded a range of implied equity values for Jaguar and Napo, respectively, which Stifel then used to calculate a range of ratios (referred to as implied ownership ratios) based on comparing: (i) the low value of the range of implied equity values of Jaguar with the high value of the range of implied equity values of Napo and; (ii) the high value of the range of implied equity values of Jaguar with the low value of the range of implied equity values of Napo. In addition, Stifel also performed a relative contribution margin analysis to assess the relative annual contributions from both Jaguar and Napo to projected revenues, net income and unlevered free cash flow.

Selected Publicly Traded Companies Analysis.

Napo:

Stifel reviewed certain publicly available financial information for the following four publicly traded, gastrointestinal focused biotechnology companies with market capitalizations of less than \$1 billion:

Selected Gastrointestinal Focused Biotechnology Companies

Ardelyx

Heron Therapeutics

RedHill Biopharma

Sucampo Pharmaceuticals

For each of the selected companies, Stifel calculated a multiple of enterprise value (calculated as equity value based on closing stock prices on March 27, 2016, plus total debt less cash and equivalents)

Table of Contents

("EV") to estimated calendar year 2018 and 2019 revenues ("EV/Revenue"), as obtained from publicly available sources. The mean and median EV/Revenue multiples calculated for the selected companies are shown in the table below:

Selected Gastrointestinal Focused Biotechnology Companies

	EV/Revenue	
	2018	2019
Mean	8.55x	2.82x
Median	9.58x	2.74x

Based on its analysis of the selected companies, Stifel selected the following range of 2018 and 2019 EV/Revenue multiples:

Selected Range of 2018 and 2019 EV/Revenue Multiples

	EV/Revenue	
	Low	High
2018 EV/Revenue	8.50x	9.50x
2019 EV/Revenue	2.50x	3.00x

Based on the selected ranges of EV/Revenue multiples, Stifel calculated an implied range of equity values of Napo by (i) multiplying the low and high values of the selected range of 2018 and 2019 EV/Revenue multiples by Napo's estimated, probability adjusted calendar year 2018 and 2019 revenues, as contained in the Napo Projections, in order to determine the corresponding enterprise value; and (ii) adding Napo net cash, which Stifel defined as cash and cash equivalents less debt, preferred stock and minority interests, as of March 1, 2017 and as provided by Jaguar management, to get to an implied equity value for Napo (the "2018 Napo EV/Revenue Analysis" and the "2019 Napo EV/Revenue Analysis," respectively). For purposes of this and its other analyses, Where applicable, all in-the-money convertible debt, which Stifel defines as any convertible note with a conversion price less than or equal to the closing price of Jaguar common stock on March 27, 2017, was treated on an as-converted basis. This analysis resulted in the following ranges of implied equity values for Napo:

Implied Equity Values for Napo

	Implied Equity Value (\$MM)	
	Low	High
2018 Napo EV/Revenue Analysis	\$ 399	\$ 446
2019 Napo EV/Revenue Analysis	\$ 143	\$ 172

Jaguar:

Stifel reviewed certain publicly available financial information for the following four publicly traded, animal health companies with market capitalizations of less than \$300 million:

Selected Animal Health Companies

Aratana Therapeutics

ImmuCell Corporation

Kindred Biosciences

Nexvet Biopharma

Table of Contents

For each of the selected companies, Stifel calculated multiple of enterprise value to estimated calendar year 2018 and 2019 revenues, as obtained from publicly available sources. The mean and median EV/Revenue multiples calculated for the selected companies are shown in the table below:

Selected Animal Health Companies

	EV/Revenue	
	2018	2019
Mean	6.46x	1.84x
Median	5.96x	1.70x

Based on its analysis of the selected companies, Stifel selected the following range of 2018 and 2019 EV/Revenue multiples:

Selected Range of 2018 and 2019 EV/Revenue Multiples

	EV/Revenue	
	Low	High
2018 EV/Revenue	6.00x	6.50x
2019 EV/Revenue	1.50x	2.00x

Based on the selected ranges of EV/Revenue multiples, Stifel calculated an implied range of equity values of Jaguar by (i) multiplying the low and high values of the selected range of 2018 and 2019 EV/Revenue multiples by Jaguar's estimated, probability adjusted calendar year 2018 and 2019 revenues, as contained in the Jaguar Projections, in order to determine the corresponding enterprise value; and (ii) adding Jaguar net cash, as of March 1, 2017 and as provided by Jaguar management, to get to an implied equity value for Jaguar (the "2018 Jaguar EV/Revenue Analysis" and the "2019 Jaguar EV/Revenue Analysis," respectively). This analysis resulted in the following ranges of implied equity values for Jaguar:

Implied Equity Values for Jaguar

	Implied Equity Value (\$MM)	
	Low	High
2018 Jaguar EV/Revenue Analysis	\$ 76	\$ 82
2019 Jaguar EV/Revenue Analysis	\$ 29	\$ 39

Relative:

Based on these analyses, Stifel then compared (i) the low value of the 2018 Jaguar EV/Revenue Analysis to the high value of the 2018 Napo EV/Revenue Analysis and the high value of the 2018 Jaguar EV/Revenue Analysis to the low value of the 2018 Napo EV/Revenue Analysis; and (ii) the low value of the 2019 Jaguar EV/Revenue Analysis to the high value of the 2019 Napo EV/Revenue Analysis and the high value of the 2019 Jaguar EV/Revenue Analysis to the low value of the 2019 Napo EV/Revenue Analysis. Each of these analyses yielded a range of implied ownership ratios between Jaguar and Napo, as set forth in the following table:

Implied Ownership Ratios

	Low	High
2018 Relative EV/Revenue Analysis	4.87x	5.91x
2019 Relative EV/Revenue Analysis	3.66x	5.93x

Stifel selected the companies on the basis of various factors, including the size of the companies, the current phase of the companies' life cycles and the similarity of the lines of business, although, as noted above, no company used in this analysis is identical to either Jaguar or Napo. Accordingly, these

Table of Contents

analyses are not purely mathematical, but also involve complex considerations and judgments concerning the differences in financial and operating characteristics of the selected companies and other factors.

Selected Precedent Transactions Analysis.

Napo:

Stifel reviewed certain publicly available information for the following four selected business combinations of biotechnology companies, announced subsequent to January 1, 2003, involving targets focused on gastrointestinal medicine with implied equity values of greater than \$100 million and less than \$1.5 billion at the time of announcement of the transaction:

Selected Gastrointestinal Focused Precedent Transactions

Date	Target	Acquiror
08/03/10	Movetis	Shire
11/29/07	Axcan Pharma	TPG Capital
06/23/05	InKine Pharmaceuticals	Salix Pharmaceuticals
04/10/03	Salix Pharmaceuticals	Axcan Pharma

For each of the selected transactions, Stifel calculated a multiple of enterprise value to revenue for the last twelve months ("LTM") prior to the date of announcement of selected transaction, as obtained from publicly available sources ("EV/LTM Revenue"). The mean and median EV/LTM Revenue multiples calculated for the selected companies are shown in the table below:

Selected Gastrointestinal Focused Precedent Transactions

	EV/LTM Revenue
Mean	4.64x
Median	4.01x

Based on its analysis of the selected transactions, Stifel selected the following range of EV/LTM Revenue multiples:

Selected Range of EV/LTM Revenue Multiples

	Low	High
EV/LTM Revenue Multiples	4.00x	4.75x

Based on the selected ranges of EV/LTM Revenue multiples, Stifel calculated a range of implied equity values of Napo by (i) multiplying the low and high values of the selected range of EV/LTM Revenue multiples by each of Napo's estimated, probability adjusted calendar year 2018, 2019 and 2020 revenues, as contained in the Napo Projections, and then discounting these values to present values using a discount rate of 21.0% (which is the midpoint of the discount rate used in the Napo discounted cash flow analysis, as described below), in order to determine the corresponding enterprise value; and (ii) adding Napo net cash, as of March 1, 2017 and as provided by Jaguar management (the "2018 Napo EV/LTM Revenue Analysis," the "2019 Napo EV/LTM Revenue Analysis" and the "2020 Napo

Table of Contents

EV/LTM Revenue Analysis," respectively). This analysis resulted in the following ranges of implied equity values for Napo:

Implied Equity Values for Napo

	Implied Equity Value (\$MM)	
	Low	High
2018 Napo EV/LTM Revenue Analysis	\$ 127	\$ 151
2019 Napo EV/LTM Revenue Analysis	\$ 129	\$ 154
2020 Napo EV/LTM Revenue Analysis	\$ 359	\$ 427

Jaguar:

Stifel reviewed certain publicly available information for the following nine selected business combinations of animal health companies, announced subsequent to January 1, 2010, involving targets in the animal health sector with implied equity values of less than \$500 million at the time of announcement of the transaction:

Selected Animal Health Precedent Transactions

Date	Target	Acquiror
09/16/16	Apex Laboratories	Dechra Pharmaceuticals
03/15/16	Putney	Dechra Pharmaceuticals
08/03/15	GENERA	Dechra Pharmaceuticals
11/17/14	Abbott Animal Health Assets	Zoetis
03/30/13	PHARMAQ	Permira
09/14/12	Teva Animal Health	Bayer
04/05/12	Eurovet Animal Health	Dechra Pharmaceuticals
01/07/11	Bomac	Bayer
10/22/10	DermaPet Inc.	Dechra Pharmaceuticals

For each of the selected transactions, Stifel calculated a multiple of enterprise value to LTM revenue, as obtained from publicly available sources. The mean and median EV/LTM Revenue multiples calculated for the selected companies are shown in the table below:

Selected Animal Health Precedent Transactions

	EV/LTM Revenue
Mean	3.06x
Median	3.84x

Based on its analysis of the selected transactions, Stifel selected the following range of EV/LTM Revenue multiples:

Selected Range of EV/LTM Revenue Multiples

	Low	High
EV/LTM Revenue Multiples	3.00x	3.75x

Based on the selected ranges of EV/LTM Revenue multiples, Stifel calculated a range of implied equity values of Jaguar by (i) multiplying the low and high values of the selected range of EV/LTM Revenue multiples by each of Jaguar's estimated, probability adjusted calendar year 2018, 2019 and 2020 revenues, as contained in the Jaguar Projections, and then discounting these values to present values using a discount rate of 19.0% (which is the midpoint of the discount rate used in the Jaguar discounted cash flow analysis, see below), in order to determine the corresponding enterprise value; and (ii) adding Jaguar net cash, as of March 1, 2017 and as provided by Jaguar management, to get to

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

an implied equity value for Jaguar (the "2018 Jaguar EV/LTM Revenue Analysis," the "2019 Jaguar EV/LTM Revenue Analysis" and the "2020 Jaguar EV/LTM Revenue Analysis," respectively). This analysis resulted in the following ranges of implied equity values for Jaguar:

Implied Equity Values for Jaguar

	Implied Equity Value (\$MM)	
	Low	High
2018 Jaguar EV/LTM Revenue Analysis	\$ 26	\$ 33
2019 Jaguar EV/LTM Revenue Analysis	\$ 35	\$ 44
2020 Jaguar EV/LTM Revenue Analysis	\$ 45	\$ 56

Relative:

Based on these analyses, Stifel then compared (i) the low value of the 2018 Jaguar EV/LTM Revenue Analysis to the high value of the 2018 Napo EV/LTM Revenue Analysis and the high value of the 2018 Jaguar EV/LTM Revenue Analysis to the low value of the 2018 Napo EV/LTM Revenue Analysis; (ii) the low value of the 2019 Jaguar EV/LTM Revenue Analysis to the high value of the 2019 Napo EV/LTM Revenue Analysis and the high value of the 2019 Jaguar EV/LTM Revenue Analysis to the low value of the 2019 Napo EV/LTM Revenue Analysis; and (iii) the low value of the 2020 Jaguar EV/LTM Revenue Analysis to the high value of the 2020 Napo EV/LTM Revenue Analysis and the high value of the 2020 Jaguar EV/LTM Revenue Analysis to the low value of the 2020 Napo EV/LTM Revenue Analysis. Each of these analyses yielded a range of implied ownership ratios between Jaguar and Napo, as set forth in the following table:

Implied Ownership Ratios

	Low	High
2018 Relative EV/LTM Revenue Analysis	3.90x	5.85x
2019 Relative EV/LTM Revenue Analysis	2.96x	4.43x
2020 Relative EV/LTM Revenue Analysis	6.42x	9.59x

Stifel selected the business combination transactions on the basis of various factors, including the size of the target company, the current phase of the companies' life cycles and the similarity of the lines of business, as of the time of the announcement of the transaction, although, as noted above, no transaction used in this analysis is identical to the Transaction. Accordingly, these analyses are not purely mathematical, but also involve complex considerations and judgments concerning the differences in financial and operating characteristics associated with each of the transactions and other factors.

Discounted Cash Flow Analysis.

Napo:

Stifel used the Napo Projections, as provided by Jaguar management to perform a discounted cash flow analysis. Stifel calculated the terminal value of the projected unlevered free cash flow by applying a range of perpetuity growth rates of 1% to 3%, as specified by Jaguar management, to Napo's projected calendar year 2026 free cash flow. Stifel then discounted these cash flows to present values using discount rates of 18.5% - 23.5%, based on Napo's weighted average cost of capital, considering Napo's company-specific circumstances and Stifel's business and industry knowledge. This analysis yielded a range of enterprise values to which Stifel then added Napo net cash, as of March 1, 2017, to

Table of Contents

get to an implied equity value for Napo (the "Napo DCF Analysis"). This analysis resulted in the following range of implied equity values for Napo:

Implied Equity Values for Napo (\$MM)

	Low	High
Napo DCF Analysis	\$ 153	\$ 304

Jaguar:

Stifel used the Jaguar Projections, as provided by Jaguar management, to perform a discounted cash flow analysis. Stifel calculated the terminal value of the projected unlevered free cash flow by applying a range of perpetuity growth rates of 1% to 3%, as specified by Jaguar management, to Jaguar's projected calendar year 2026 free cash flow. Stifel then discounted these cash flows to present values using discount rates from 16.5% - 21.5%, based on Jaguar's weighted average cost of capital, considering Jaguar's company-specific circumstances and Stifel's business and industry knowledge. This analysis yielded a range of enterprise values to which Stifel then added Jaguar net cash, as of March 1, 2017, to get to an implied equity value for Jaguar (the "Jaguar DCF Analysis"). This analysis resulted in the following range of implied equity values for Jaguar:

Implied Equity Values for Jaguar (\$MM)

	Low	High
Jaguar DCF Analysis	\$ 48	\$ 96

Relative:

Based on these analyses, Stifel then compared the low value of the Jaguar DCF Analysis to the high value of the Napo DCF Analysis and the high value of the Jaguar DCF Analysis to the low value of the Napo DCF Analysis. This analysis yielded a range of implied ownership ratios between Jaguar and Napo, as set forth in the following table:

Implied Ownership Ratios

	Low	High
Relative DCF Analysis	1.60x	6.30x

Contribution Margin Analysis.

In this analysis, Stifel used the Jaguar Projections and the Napo Projections, each as provided by Jaguar management, to assess the relative annual contributions from both Jaguar and Napo to

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

the: (i) revenue; (ii) net income; and (iii) unlevered free cash flow, without certain pro-forma adjustments. This analysis resulted in the following contribution margins for Jaguar and Napo:

	For The Year Ending December 31,									
	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E
<u>Revenue</u>										
Jaguar	41%	21%	26%	14%	13%	17%	12%	10%	12%	9%
Napo	59%	79%	74%	86%	87%	83%	88%	90%	88%	91%
<u>Net Income</u>										
Jaguar	NM	NM	NM	25%	38%	45%	24%	18%	23%	15%
Napo	NM	NM	NM	75%	62%	55%	76%	82%	77%	85%
<u>Unlevered Free Cash Flow</u>										
Jaguar	NM	NM	NM	NM	NM	60%	33%	20%	21%	17%
Napo	NM	NM	NM	NM	NM	40%	67%	80%	79%	83%

Miscellaneous

No individual methodology was given a specific weight, nor should any methodology be viewed individually. Additionally, no company or transaction used in any analysis as a comparison is identical to Jaguar or the Transaction, and they all differ in material ways. Accordingly, an analysis of the results described below is not mathematical; rather it involves complex considerations and judgments concerning differences in financial and operating characteristics of the companies and other factors that could affect the public trading value of the selected companies or transactions to which they are being compared.

The preparation of a fairness opinion is a complex process and is not necessarily susceptible to a partial analysis or summary description. In arriving at its Opinion, Stifel considered the results of all of its analyses as a whole and did not attribute any particular weight to any analysis or factor considered by it. Stifel believes that the summary provided and the analyses described above must be considered as a whole and that selecting portions of these analyses, without considering all of them, would create an incomplete view of the process underlying Stifel's analyses and Opinion; therefore, the ranges of valuations and relative valuations resulting from any particular analysis described above should not be taken to be Stifel's view of the actual valuation of either Jaguar or Napo or their relative valuation.

Stifel is acting as financial advisor to Jaguar in connection with the Merger. Jaguar agreed to pay Stifel a fee of \$1,000,000 for its services, \$750,000 of which was earned upon delivery of its Opinion and is payable upon the earlier of consummation of the Merger and the date 90 days following the date of Stifel's Opinion, and the remaining portion of which is contingent upon the completion of the Merger. In addition, Jaguar has agreed to reimburse Stifel for its expenses incurred in connection with Stifel's engagement and to indemnify Stifel and its affiliates and their respective officers, directors, employees and agents, and any persons controlling Stifel or any of its affiliates, against specified liabilities. In the ordinary course of business Stifel and its clients may transact in the equity securities of each of Jaguar and Napo and may at any time hold a long or short position in such securities. Stifel may seek to provide investment banking or financial advisory services to Jaguar or its affiliates in the future, for which Stifel would seek customary compensation.

Table of Contents

Accounting Treatment

The acquisition of Napo common stock by Jaguar in the merger will be accounted for under the acquisition method of accounting according to United States generally accepted accounting principles. This means that the assets and liabilities of Napo will be recorded, as of the completion of the merger, at their fair values and consolidated with those of Jaguar. This will result in recording an amount for goodwill, which represents the excess of the purchase price over the fair value of the identifiable net assets of Napo. Financial statements of Jaguar issued after the merger will reflect only the operations of Napo's business after the merger and will not be restated retroactively to reflect the historical financial position or results of operations of Napo.

All unaudited pro forma combined condensed financial information contained in this joint proxy statement/prospectus was prepared using the acquisition method of accounting for business combinations. The final allocation of the purchase price will be determined after the merger is completed and after completion of an analysis to determine the fair value of the assets and liabilities of Napo's business. Accordingly, the final purchase accounting adjustments may be materially different from the unaudited pro forma adjustments. Any decrease in the fair value of the assets or increase in the fair value of the liabilities of Napo's business as compared to the unaudited pro forma combined condensed financial information included in this joint proxy statement/prospectus will have the effect of increasing the amount of recorded goodwill. An increase or decrease in the share price of Jaguar would have the effect of increasing or decreasing goodwill, as the case may be. The goodwill amount will not be affected by a change in the Napo share price.

Material United States Federal Income Tax Consequences of the Merger

The following is a discussion of material U.S. federal income tax consequences of the merger applicable to U.S. Holders (as defined below) who in the merger exchange their shares of Napo common stock for the contingent right, assuming the merger is consummated as contemplated herein. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the Code, U.S. Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncement of the Internal Revenue Service ("IRS"), each as in effect on the date of this joint proxy statement/prospectus, and all of which are subject to change, possibly with retroactive effect.

This discussion is limited to U.S. Holders that hold their shares of Napo common stock as capital assets (as defined in Section 1221 of the Code) for United States federal income tax purposes. This discussion does not address (i) the Medicare contribution tax on net investment income or the alternative minimum tax, (ii) the tax consequences of transactions effectuated before, after or at the same time as the merger (whether or not they are in connection with the merger), including without limitation, transactions effectuated pursuant to the Settlement Agreement, the Investor Rights Agreement and other agreements in which shares of Jaguar common stock or Jaguar convertible notes will be issued to certain purchasers or investors, as applicable, and (iii) the tax consequences to holders of options, warrants or similar rights to purchase Napo common stock.

This discussion does not address all of the U.S. federal income tax consequences that may be relevant to a particular Napo stockholder or Napo stockholders that are subject to special treatment under United States federal income tax laws including, but not limited to, non-U.S. persons or entities, financial institutions, tax-exempt organizations, persons who hold their shares of Napo common stock through individual retirement accounts or other tax-deferred accounts, insurance companies, regulated investment companies, partnerships or other pass-through entities, broker-dealers, traders in securities who elect the mark-to-market method of accounting for their securities, Napo stockholders who hold their shares as part of a "straddle," "hedge," "conversion transaction" or other integrated transaction, Napo stockholders who acquired their shares of Napo common stock pursuant to the exercise of

Table of Contents

employee stock options or otherwise in connection with the performance of services, United States expatriates, Napo stockholders who have a functional currency other than the United States dollar, Napo stockholders liable for the alternative minimum tax and Napo stockholders who exercise their appraisal rights.

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of Napo common stock that, for U.S. federal income tax purposes, is or is treated as:

an individual who is a citizen or resident of the United States;

a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia;

an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or

a trust that either (i) is subject to the primary supervision of a court within the United States and one or more United States persons (within the meaning of Section 7701(a)(3) of the Code) has or have the authority to control all substantial decisions of such trust, or (ii) has a valid election in effect under applicable Treasury Regulations to be treated as a United States person for U.S. federal income tax purposes.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) holds shares of Jaguar common stock, the U.S. federal income tax treatment of a partner in the partnership generally will depend on the status of the partner and the activities of the partnership. A partner in a partnership holding shares of Jaguar common stock should consult its tax advisors with respect to the tax consequences of the merger.

No ruling has been or will be requested from the IRS with respect to the tax consequences of the merger. As a result, there can be no assurance that the IRS will not assert, or that a court would not sustain, a position contrary to any of the following conclusions.

Napo stockholders are urged to consult their tax advisors as to the particular United States federal income tax consequences of the transaction to them, as well as any tax consequences arising under any state, local and non-United States tax laws or any other United States federal tax laws.

Tax Consequences to Napo Stockholders

Exchange of Napo Common Stock for Contingent Right to Receive Jaguar Stock. The merger will not qualify as a tax-free reorganization within the meaning of Section 368 of the Internal Revenue Code of 1986, as amended (sometimes referred to as the Code). Although it is not free from doubt, a Napo Stockholder should not recognize any taxable gain or loss until such Napo Stockholder's Certificate Delivery Date. The term "Certificate Delivery Date" means, with respect to each Napo Stockholder, the date on which such Napo Stockholder delivers to the Exchange Agent his, her or its Napo stock certificate(s) for cancellation, together with a letter of transmittal duly executed and completed in accordance with its terms and such other documents and/or payments of withholding taxes as may be reasonably required by the Exchange Agent or Jaguar. At that time, such Napo Stockholder will recognize gain or loss from the sale of his, her or its shares of Napo common stock in an amount equal to the difference between (i) the fair market value of a Merger Share on such Napo Stockholder's Certificate Delivery Date multiplied by the number of Merger Shares received by such Napo Stockholder (sometimes referred to as the Purchase Price) and (ii) such Napo Stockholder's tax basis in his, her or its shares of Napo common stock surrendered in the merger. Any such capital gain or capital loss will constitute long-term capital gain or loss if the Napo Stockholder's holding period for his, her or its shares of Napo common stock is more than one year as of the effective date of the

Table of Contents

merger. Under current law, long-term capital gains of non-corporate taxpayers are taxed at a reduced U.S. federal income tax rate. Under current law, the deductibility of capital losses is subject to limitations.

If, on the Final Determination Date, there has been a Final Determination that no shares of Jaguar common stock will be issued to the Napo Stockholders, each Napo Stockholder will recognize a capital loss in an amount equal to such Napo Stockholder's tax basis in his, her or its shares of Napo common stock surrendered in the merger. See discussion above regarding the holding period required for the loss to constitute a long-term capital loss and the limitations on the deductibility of capital losses.

In addition, a portion of the Purchase Price received by each Napo Stockholder will constitute imputed interest that will be taxed at ordinary rates pursuant to Section 483 of the Code. The imputed interest rules of Section 483 apply regardless of whether a Napo Stockholder recognizes a capital gain or loss on the merger. However, if a Napo Stockholder recognizes capital gain on the merger, the amount of such capital gain will be reduced dollar-for-dollar by the amount of the Napo Stockholder's imputed interest, and if a Napo Stockholder recognizes a capital loss on the merger, the amount of such capital loss will be increased dollar-for-dollar by the amount of the Napo Stockholder's imputed interest. If no shares of Jaguar common stock are issued to the Napo Stockholders, Section 483 will not apply and the Napo Stockholders will not have any imputed interest.

Tax Basis in, and Holding Period for, Jaguar Common Stock. A Napo Stockholder's aggregate tax basis in the shares of Jaguar common stock, if any, received by such Napo Stockholder pursuant to the merger should be equal to the fair market value of such shares of Jaguar common stock on the Certificate Delivery Date. The holding period of shares of Jaguar common stock received by a Napo Stockholder pursuant to the merger should begin on the Certificate Delivery Date.

Information reporting and backup withholding

In general, information reporting will apply to any dividends paid with respect to shares of Jaguar common stock and any proceeds from the sale, exchange or other disposition, through a broker, of shares of Jaguar common stock that are paid to a U.S. Holder, unless the U.S. Holder is an exempt recipient and appropriately establishes that exemption. Backup withholding may apply to such payments unless a U.S. Holder (i) provides Jaguar with a correct taxpayer identification number and certifies that it is not subject to backup withholding on Form W-9 or a substantially similar form, or (ii) otherwise proves to Jaguar and its exchange agent that it is exempt from backup withholding. The current backup withholding rate is 28%. If a U.S. Holder does not provide a correct taxpayer identification number on IRS Form W-9 or other proper certification, the stockholder may be subject to penalties imposed by the IRS.

Backup withholding is not an additional tax and any amounts withheld under the backup withholding rules generally will be allowed as a refund or credit against a U.S. Holder's U.S. federal income tax liability provided the U.S. Holder timely furnishes the required information to the IRS. In the event of backup withholding, a U.S. Holder should consult his, her or its tax advisor to determine whether such U.S. Holder is entitled to any tax credit, tax refund or other tax benefit as a result of such backup withholding.

The tax consequences of the transaction to a particular Napo stockholder will depend on the stockholder's individual circumstances. Napo stockholders are strongly encouraged to consult their tax advisors regarding the specific tax consequences of the transaction to them, including tax return reporting requirements and the applicability of federal, state, local and non-United States tax laws.

Table of Contents

Appraisal Rights

Jaguar stockholders are not entitled to appraisal rights in connection with the merger. See "Information About the Jaguar Special Meeting and Vote Appraisal Rights; Trading of Shares" beginning on page 190 for more detail.

Under Delaware law, Napo stockholders have appraisal rights in connection with the merger. Therefore, a stockholder of Napo may elect to be paid cash for the fair value of such stockholder's shares as determined by the Delaware Court of Chancery and in accordance with the procedures set forth in Section 262. See "Information About the Napo Special Meeting and Vote Appraisal Rights" beginning on page 219 for more detail.

Regulatory Matters Relating to the Merger

Neither Jaguar nor Napo is required to make any filings or to obtain approvals or clearances from any antitrust regulatory authorities in the United States or other countries to complete the merger. In the United States, Jaguar must comply with applicable federal and state securities laws and the rules and regulations of The NASDAQ Stock Market LLC in connection with the issuance of shares of Jaguar's common stock in the merger, including the filing with the SEC of this joint proxy statement/prospectus. The merger agreement provides that Napo and Jaguar shall obtain all necessary actions or nonactions, waivers, consents and approvals from governmental entities or other persons necessary in connection with the consummation of the merger and the other transactions contemplated by the merger agreement and take all reasonable steps as may be necessary to obtain an approval or waiver from, or to avoid any action or proceeding by, any governmental entity or other persons necessary in connection with the consummation of the merger and the other transactions contemplated by the merger agreement.

Napo RSUs, Napo Options and Napo Warrants

At the effective time of the merger, each outstanding Napo RSU, option and warrant, whether or not vested, to receive Napo stock that is outstanding immediately prior to the effective time of the merger will be converted into an RSU, option or warrant to receive Jaguar common stock.

Each RSU to acquire Napo common stock will be converted automatically at the effective time of the merger into an RSU to acquire Jaguar common stock, which will be governed by the terms of the Jaguar 2014 Stock Plan. Under the merger agreement, certain holders of Napo RSUs will agree to become "RSU Indemnitors" with respect to the Jaguar RSUs to be issued to them pursuant to the merger, and to be bound by the indemnification obligations of RSU Indemnitors set forth in the merger agreement with respect to such Jaguar RSUs. In the event that a Parent Indemnitee (as such term is defined in the merger agreement) is entitled to indemnification, each RSU Indemnitor shall promptly pay to the Parent Indemnitees his or her pro rata share of the indemnification amount determined in accordance with the merger agreement, either in cash or, at the sole election of the RSU Indemnitor, forfeiture of an equivalent dollar amount of Jaguar RSUs held by the RSU Indemnitor. To the extent Tranche B Shares are delivered to Nantucket as a result of Nantucket not achieving the applicable Hurdle Amount from the sale of Tranche A Shares, the RSU Indemnitors will forfeit to the holders of contingent rights a portion of the fixed number of shares issuable under their Jaguar RSUs.

Each option to acquire Napo common stock will be converted automatically at the effective time of the merger into an option to acquire Jaguar common stock, which will be governed by the terms of the Jaguar 2014 Stock Plan. The number of shares of Jaguar common stock subject to each outstanding Napo option assumed by Jaguar will be determined by multiplying the number of shares of Napo common stock that were subject to such option, as applicable, by 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation

Table of Contents

of the merger) and rounding the resulting number down to the nearest whole number of shares of Jaguar common stock. The per share exercise price for the Jaguar common stock issuable upon exercise of each Napo option or warrant assumed by Jaguar will be determined by dividing the per share exercise price of Napo common stock subject to such option or warrant, as applicable, by 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger) and rounding the resulting exercise price up to the nearest whole cent. Any restriction on the exercise of any Napo option will continue in full force and effect and the term, exercisability, vesting schedule and other provisions of such Napo option will remain unchanged.

Each warrant to acquire Napo common stock will be converted automatically at the effective time of the merger into a warrant to acquire Jaguar common stock. The number of shares of Jaguar common stock subject to each outstanding Napo warrant assumed by Jaguar will be determined by multiplying the number of shares of Napo common stock that were subject to such warrant, as applicable, by 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger) and rounding the resulting number down to the nearest whole number of shares of Jaguar common stock. The per share exercise price for the Jaguar common stock issuable upon exercise of each Napo warrant assumed by Jaguar will be determined by dividing the per share exercise price of Napo common stock subject to such warrant, as applicable, by 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger) and rounding the resulting exercise price up to the nearest whole cent. Any restriction on the exercise of any Napo warrant will continue in full force and effect.

Stock Exchange Listing; Shares to be Issued in the Merger

It is a condition to the merger that the shares of Jaguar common stock issuable pursuant to the merger be approved for listing on The NASDAQ Capital Market, subject to official notice of issuance. In addition, if the merger results in a "change of control" under NASDAQ Marketplace Rule 5635(b), Jaguar will be required to submit a new original listing application with NASDAQ and comply with the NASDAQ Capital Market initial listing requirements.

Shares of Jaguar common stock will continue to be traded on The NASDAQ Capital Market under the symbol "JAGX" immediately following the completion of the merger. Shares of Jaguar non-voting common stock will not be listed for trading on any securities exchange, including The NASDAQ Capital Market.

A total of an aggregate of approximately 69,299,346 shares of Jaguar common stock and non-voting common stock will be issued upon the closing of the transactions contemplated by the merger agreement merger and the related Napo debt settlement, which will represent approximately 75% of the total Jaguar common stock and non-voting common stock issued and outstanding immediately following the merger.

After the merger, Jaguar stockholders will continue to own their existing shares of Jaguar common stock. Accordingly, Jaguar stockholders will hold the same number of shares of Jaguar common stock that they held immediately prior to the merger. However, because Jaguar will be issuing new shares of Jaguar common stock and non-voting common stock to Napo creditors, contingent rights to receive Jaguar common stock to Napo stockholders, and options, warrants and restricted stock units exercisable for Jaguar common stock to holders of Napo options, warrants and restricted stock units in the merger, the stockholders of Jaguar will experience dilution as a result of the issuance of shares in the

Table of Contents

transactions contemplated by the merger agreement and each outstanding share of Jaguar common stock immediately prior to the merger will represent a smaller percentage of the total number of shares of Jaguar common stock and non-voting common stock issued and outstanding after the merger. It is expected that Jaguar stockholders before the merger will hold approximately 25% of the total Jaguar common stock and non-voting common stock issued and outstanding immediately following completion of the merger, on a fully diluted basis of Jaguar as of March 31, 2017 assuming the exercise or conversion of all outstanding options and warrants other than those options and warrants exercisable or convertible for approximately 300,000 shares of Jaguar common stock with an exercise/conversion price of \$5.00 or more. Thus, Jaguar stockholders before the merger will experience dilution in the amount of approximately 75% as a result of the merger.

Table of Contents

**ADDITIONAL INTERESTS OF CERTAIN OF JAGUAR AND NAPO'S
DIRECTORS AND EXECUTIVE OFFICERS IN THE MERGER**

Interests of the Jaguar Directors and Executive Officers in the Merger

In considering the recommendation of Jaguar's board of directors with respect to issuing shares of Jaguar common stock as contemplated by the merger agreement and the other matters to be acted upon by Jaguar stockholders at the Jaguar special meeting, Jaguar stockholders should be aware that certain members of the board of directors and executive officers of Jaguar have interests in the merger that may be different from, or in addition to, the interests of Jaguar stockholders. These interests relate to or arise from the matters described below. The board of directors of Jaguar was aware of these potential conflicts of interest and considered them, among other matters, in reaching their respective decisions to approve the merger agreement and the merger, and to recommend that the Jaguar stockholders approve the Jaguar proposals to be presented to the Jaguar stockholders for consideration at the Jaguar special meeting as contemplated by this proxy statement/prospectus.

The named executive officers are not entitled any compensation that is based on or otherwise relates to the merger or any pension or non-qualified deferred compensation benefits enhancements or any tax reimbursements in connection with the merger.

2017 Exchangeable Notes

If issuance of shares of Jaguar common stock in exchange for the 2017 Exchangeable Note is not approved by Jaguar stockholders at the special meeting, or if the merger agreement is terminated prior to completion of the merger, the outstanding balance due under the Note will not be converted into Jaguar common stock and the Note will remain outstanding. Moreover, because conversion of the outstanding balance of the Note into shares of Jaguar common stock is a closing condition of the merger agreement, success of the merger is also dependent upon stockholder approval of conversion of the Note.

Ownership Interests

As of December 31, 2016, Jaguar's Chief Executive Officer and President, Lisa A. Conte, owned or controlled 2.5% of the outstanding shares of Jaguar common stock. Ms. Conte is also the interim Chief Executive Officer of Napo.

Indemnification and Insurance for the Jaguar Officers and Directors

Upon the effective date of the merger and for a period that for six years after the effective time of the merger, Jaguar will cause the surviving corporation to honor all rights to indemnification for acts or omissions prior to the effective time of the merger existing in favor of Jaguar and Napo directors or officers as provided in Napo's organizational documents. The merger agreement also provides that, from and after the effective time of the merger, Jaguar will provide exculpation, indemnification and advancement expenses for each former director, officer, employee or agent of Napo to cover actions at or prior to the effective time of the merger, including all transactions contemplated by the merger agreement, which is at least as favorable in scope and amount as the exculpation, indemnification and advancement of expenses provided to such former director, officer, employee or agent of Napo prior to the effective time of the merger.

Interests of the Napo Directors and Executive Officers in the Merger

In considering the recommendation of Napo's board of directors with respect to adopting the merger agreement, Napo stockholders should be aware that certain members of the board of directors and executive officers of Napo have interests in the merger that may be different from, or in addition

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

to, the interests of Napo stockholders. These interests relate to or arise from the matters described below. The board of directors of Napo was aware of these potential conflicts of interest and considered them, among other matters, in reaching their respective decisions to approve the merger agreement and the merger, and to recommend, that the Napo stockholders approve the Napo proposals to be presented to the Napo stockholders for consideration at the Napo special meeting as contemplated by this proxy statement/prospectus.

The named executive officers are not entitled any compensation that is based on or otherwise relates to the merger or any pension or non-qualified deferred compensation benefits enhancements or any tax reimbursements in connection with the merger.

Ownership Interests

Some of Napo's directors and executive officers currently hold shares of Napo's common stock. The table below sets forth the anticipated ownership of Napo's common stock by Napo's directors and executive officers immediately prior to the closing of the merger based on their ownership of Napo's capital stock as of December 31, 2016.

Stockholder Name	Number of Shares of Napo Common Stock Immediately Prior to the Closing of the Merger
Lisa A. Conte(1)	1,394,380
Richard W. Fields(2)	
Joshua Mailman(3)	5,135,674
Gregory Stock(4)	386,273
Charles Thompson(5)	137,000

- (1) Lisa A. Conte is Napo's interim chief executive officer. She is also the chief executive officer and president of Jaguar.
- (2) Mr. Fields is a member of Napo's board of directors.
- (3) Mr. Mailman is a member of Napo's board of directors.
- (4) Mr. Stock is a member of Napo's board of directors.
- (5) Mr. Thompson is Napo's chief financial officer.

Stock Options

Napo's directors and Napo's executive officers hold options to purchase shares of Napo common stock, which, pursuant to the merger agreement, will be converted into and become options to purchase shares of Jaguar common stock. In connection with the conversion of the options, the number of shares subject to the options and the option exercise prices will be adjusted pursuant to the terms of the merger agreement. The number of shares subject to each option will be multiplied by 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger), rounding any resulting fractional shares down to the nearest whole share, and the exercise price of each option will be divided by 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

merger), rounding up to the nearest whole cent. The option terms will remain the same, including any vesting terms. The table below sets forth certain information with respect to the options.

Officer Name	Number of Napo Options Immediately Prior to the Closing of the Merger
Lisa A. Conte(1)	757,000
Richard W. Fields(2)	
Joshua Mailman(3)	
Gregory Stock(4)	300,000
Charles Thompson(5)	137,000

- (1) Lisa A. Conte is Napo's interim chief executive officer. She is also the chief executive officer and president of Jaguar.
- (2) Mr. Fields is a member of Napo's board of directors.
- (3) Mr. Mailman is a member of Napo's board of directors.
- (4) Mr. Stock is a member of Napo's board of directors.
- (5) Mr. Thompson is Napo's chief financial officer.

RSUs

Napo's directors and Napo's executive officers hold RSUs for the issuance of shares of Napo common stock, which, pursuant to the merger agreement, will be converted into and become RSUs to receive shares of Jaguar common stock. In connection with the conversion of the RSUs, the number of shares subject to the RSUs will be adjusted pursuant to the terms of the Stock Award Substitution and Indemnification Agreement to be entered into between Jaguar, Napo, Greg Stock, and the RSU holders. The number of shares subject to each RSU will be multiplied by 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger), rounding any resulting fractional shares down to the nearest whole share. The RSU terms will remain the same, including any vesting terms. The table below sets forth certain information with respect to the RSUs.

Officer Name	Number of Napo RSUs Immediately Prior to the Closing of the Merger
Lisa A. Conte(1)	10,474,783
Richard W. Fields(2)	1,861,812
Joshua Mailman(3)	546,232
Gregory Stock(4)	2,512,929
Charles Thompson(5)	2,619,078

- (1) Lisa A. Conte is Napo's interim chief executive officer. She is also the chief executive officer and president of Jaguar.
- (2) Mr. Fields is a member of Napo's board of directors.
- (3) Mr. Mailman is a member of Napo's board of directors.
- (4)

Mr. Stock is a member of Napo's board of directors.

(5)

Mr. Thompson is Napo's chief financial officer.

Table of Contents

Management Following the Merger

As described elsewhere in this joint proxy statement/prospectus/, including in "Management of the Combined Company After the Merger" beginning on page 173, Napo's interim Chief Executive Officer, Lisa A. Conte, who is also the Chief Executive Officer and President of Jaguar, will continue to serve as Chief Executive Officer and President of the combined company.

Severance Arrangements

Under each executive officer's employment agreement, such executive officer is not entitled to "compensation upon termination".

Indemnification and Insurance for the Napo Officers and Directors

The merger agreement provides that for six years after the effective time of the merger and to the fullest extent permitted by law, Jaguar will cause the surviving corporation to honor all rights to indemnification for acts or omissions prior to the effective time of the merger existing in favor of Napo directors or officers as provided in Napo's organizational documents. The merger agreement also provides that, from and after the effective time of the merger, Napo will provide exculpation, indemnification and advancement expenses for each former director, officer, employee or agent of Napo to cover actions at or prior to the effective time of the merger, including all transactions contemplated by the merger agreement, which is at least as favorable in scope and amount as the exculpation, indemnification and advancement of expenses provided to such former director, officer, employee or agent of Napo prior to the effective time of the merger.

Limitations on Liability and Indemnification

In addition to the indemnification required in the merger agreement, Napo has entered into indemnification agreements with each of its directors and executive officers. These agreements provide for the indemnification of the directors and executive officers of Napo for all reasonable expenses and liabilities incurred in connection with any action or proceeding brought against them by reason of the fact that they are or were agents of Napo.

Table of Contents

THE MERGER AGREEMENT AND RELATED AGREEMENTS

The following discussion summarizes material provisions of the Agreement and Plan of Merger, which we refer to as the merger agreement, a copy of which is attached as Annex A to this joint proxy statement/prospectus and is incorporated by reference herein. The rights and obligations of the parties are governed by the express terms and conditions of the merger agreement and not by this summary. This summary is not complete and is qualified in its entirety by reference to the complete text of the merger agreement. We urge you to read the merger agreement carefully in its entirety, as well as this joint proxy statement/prospectus, before making any decisions regarding the merger.

The representations and warranties described below and included in the merger agreement were made by Jaguar and Merger Sub, on one hand, and Napo, on the other hand, to each other as of specific dates. The assertions embodied in those representations and warranties were made solely for purposes of the merger agreement and may be subject to important qualifications and limitations agreed to by Jaguar, Merger Sub, and Napo in connection with negotiating its terms, including, but not limited to, the qualifications and limitations listed in the disclosure schedules to the merger agreement. Moreover, the representations and warranties may be subject to a contractual standard of materiality that may be different from what may be viewed as material to stockholders, or may have been used for the purpose of allocating risk between Jaguar, Merger Sub, and Napo rather than establishing matters as facts. Information concerning the subject matter of these representations and warranties may have changed since the date of the merger agreement.

Structure

The merger agreement provides for the merger of Merger Sub with and into Napo. Napo will be the surviving corporation in the merger and will remain a wholly-owned subsidiary of Jaguar.

Completion and Effectiveness of the Merger

The merger will be completed as promptly as practicable after all of the conditions to completion of the merger are satisfied or waived, including the approval of the stockholders of Jaguar and Napo. Jaguar and Napo are working to complete the merger as quickly as practicable. However, Jaguar and Napo cannot predict the exact timing of the completion of the merger because it is subject to various conditions.

Merger Consideration

Common Stock and Non-Voting Common Stock

Immediately prior to the effective time of the merger, certain existing Napo debt will be exchanged for Jaguar common stock. At the effective time of the merger,

outstanding shares of common stock of Napo will be converted into contingent rights to receive (x) up to a whole number of shares of Jaguar common stock comprising in the aggregate up to approximately 21.5% of the fully diluted shares of Jaguar common stock immediately following the consummation of the merger, which contingent rights vest assuming the resale of the Tranche A Shares to third parties provides Nantucket with specified cash returns sufficient to satisfy the applicable Hurdle Amount and (y) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, additional shares of the Jaguar common stock (equal to 50% of the unsold Tranche A Shares), which will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units;

each outstanding RSU for the issuance of Napo common stock will be assumed by Jaguar and will be converted into a RSU for the issuance of Jaguar common stock;

Table of Contents

each outstanding option to purchase shares of Napo common stock will be assumed by Jaguar and will be converted into an option to purchase shares of Jaguar common stock; and

each outstanding warrant to purchase shares of Napo common stock will be assumed by Jaguar and will be converted into a warrant to purchase shares of Jaguar common stock.

No fractional shares of Jaguar common stock will be issued in connection with the merger. Instead, any fractional shares will be rounded down to the next whole number of shares.

Based on the number of shares of Jaguar common stock issued and outstanding as of March 31, 2017, a total of an aggregate of approximately 69,299,346 shares of Jaguar common stock and non-voting common stock will be issued upon the closing of the merger and the Napo debt settlement, on a fully diluted basis of Jaguar as of March 31, 2017. Such amount will be adjusted based upon the actual number of shares of Napo common stock, RSUs and warrants outstanding at the effective time of the merger.

Adjustments

The merger consideration will be equitably adjusted to provide Napo creditors with the same economic effect contemplated by the merger agreement if, at any time between the signing and the effective time of the merger, there is any change in the outstanding shares of capital stock of Napo or Jaguar by reason of any reclassification, recapitalization, split-up, combination, exchange of shares or similar readjustment within such period, or a stock dividend with a record date during such period.

Calculation of Shares of Jaguar Common Stock Issuable to Holders of Contingent Rights

The shares of Jaguar common stock issuable upon vesting of the contingent rights (sometimes referred to as the Merger Shares) are comprised of the following three groups of shares:

- (i) Up to 19,900,202 shares of Jaguar common stock initially issued by Jaguar to Nantucket and held in an escrow account (sometimes referred to herein as the Tranche B Shares), some or all of which will be released to holders of contingent rights only if the aggregate net proceeds from the sale of Tranche A Shares (and, if necessary, from the sale of some of the Tranche B Shares) equal or exceeds the applicable Hurdle Amount);
- (ii) if the applicable Hurdle Amount is achieved before all of the Tranche A Shares are sold, then additional shares of the Jaguar common stock (equal to 50% of the unsold Tranche A Shares) will be distributed pro rata among holders of contingent rights and holders of Napo restricted stock units; and
- (iii) Up to 3,846,709 shares of Jaguar common stock, representing a fixed portion of the shares issuable under Jaguar's restricted stock units issued by Jaguar to the RSU Indemnitors upon consummation of the merger, which shares are subject to forfeiture and will be issued to holders of contingent rights in the event that some or all of the Tranche B Shares are released from escrow and delivered to Nantucket as a result of Nantucket not achieving the applicable Hurdle Amount from the sale of the Tranche A Shares.

The figures above are subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger. The total number of Merger Shares, which may consist of shares from one or more of the groups described above, is calculated using the methodology set forth in Schedule 1 (Contingent Right of Company Stockholders) and Schedule 2 (Number of Shares of Parent Common Stock Issuable under Parent Warrants, Parent RSUs, and Parent Stock Options) of the merger agreement. The application of such methodology to calculate the number of Merger Shares in different scenarios is illustrated by the examples attached hereto as *Annex E*.

Table of Contents

Shares Owned by Jaguar

At the effective time of the merger, each share of Napo common stock owned of record by Jaguar or Merger Sub will, in each case, be cancelled, and no merger consideration will be delivered in exchange for those shares.

Dividends and Distributions

No dividends or other distributions declared or made after the effective time of the merger with respect to Jaguar stock with a record date after the effective time of the merger shall be paid to any holder of Napo common stock, unless and until the contingent right to the Jaguar common stock vests. Subject to the effect of escheat, tax or other applicable laws, assuming the contingent right vests, such Napo stockholder will be paid (i) promptly, the amount of dividends or other distributions with a record date after the vesting date of the contingent right theretofore paid with respect to such shares of Jaguar and (ii) at the appropriate payment date, the amount of dividends or other distributions, with a record date after the vesting date of the contingent right and a payment date occurring after the vesting date, payable with respect to such shares of Jaguar.

Appraisal Rights

Holders of Napo common stock will be entitled to appraisal rights under Delaware law and to obtain payment in cash for the judicially-determined fair value of their shares of Napo common stock in connection with the merger agreement if the merger is consummated and provided that the holders follow the requirements of Delaware law. If any such holder fails to perfect or waives, withdraws or loses the right to appraisal under Delaware law or if a court of competent jurisdiction determines that such holder is not entitled to the relief provided thereunder, then (i) such shares of Napo common stock that were subject to the appraisal (appraisal shares) will cease to constitute appraisal shares and (ii) the right of such holder to be paid the fair value of such holder's appraisal shares will be forfeited and cease. If such forfeiture occurs following the effective time of the merger, each such appraisal share will thereafter be deemed to have been converted into and to have become, as of the effective time of the merger, the right to receive the merger consideration (without interest thereon). See "Appraisal Rights" beginning on page 249 for additional information and the full text of Section 262 reproduced in its entirety as *Annex D* to this joint proxy statement/prospectus.

Treatment of Napo RSUs

As of March 31, 2017, there were outstanding RSUs to receive up to 32,371,101 shares of Napo common stock expiring on December 31, 2018. Each RSU to acquire Napo common stock will be converted automatically at the effective time of the merger into an RSU to acquire Jaguar common stock, which will be governed by the terms of the Jaguar 2014 Stock Plan. Under the merger agreement, certain holders of Napo RSUs will agree to become "RSU Indemnitors" with respect to the Jaguar RSUs to be issued to them pursuant to the merger, and to be bound by the indemnification obligations of RSU Indemnitors set forth in the merger agreement with respect to such Jaguar RSUs. In the event that a Parent Indemnitee (as such term is defined in the merger agreement) is entitled to indemnification, each RSU Indemnitor shall promptly pay to the Parent Indemnitees his or her pro rata share of the indemnification amount determined in accordance with the merger agreement, either in cash or, at the sole election of the RSU Indemnitor, forfeiture of an equivalent dollar amount of Jaguar RSUs held by the RSU Indemnitor. To the extent Tranche B Shares are delivered to Nantucket as a result of Nantucket not achieving the applicable Hurdle Amount from the sale of Tranche A Shares, the RSU Indemnitors will forfeit to the holders of contingent rights a portion of the fixed number of shares issuable under their Jaguar RSUs.

Table of Contents

Treatment of Napo Options and Warrants

As of March 31, 2017, there were outstanding options and warrants to purchase up to 9,711,443 shares of Napo common stock, at exercise prices of \$0.10 to \$0.55328, expiring on dates ranging from November 7, 2017 to December 31, 2025. Each outstanding option and warrant to purchase Napo common stock will be converted automatically at the effective time of the merger into an option or warrant to purchase Jaguar common stock and will continue to be governed by the terms of the relevant Napo option or warrant agreement, except that:

the number of shares of Jaguar common stock subject to each such option or warrant will be equal to the product of the number of shares of Napo common stock previously subject to the Napo option or warrant and 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger), rounded down to the next whole share; and

the per share exercise price for the Jaguar common stock issuable upon exercise of such option or warrant will be equal to (i) the exercise price for each share of Napo common stock previously subject to the option or warrant immediately prior to completion of the merger, divided by (ii) 0.183823529 (subject to adjustment for various contingencies, such as any financing transaction by either Jaguar or Napo that is consummated during the period between the execution of the merger agreement and the consummation of the merger), rounded up to the nearest whole cent.

Any restriction on the exercise of any Napo option or warrant will continue in full force and effect and the term, exercisability, vesting schedule and other provisions of such Napo option or warrant will remain unchanged.

Fractional Shares

Fractional shares of Jaguar common stock will not be issued pursuant to the merger. Instead, any fractional shares will be rounded down to the next whole number of shares.

Conversion of Shares; Exchange of Certificates

After the effective time, each certificate that previously represented shares of Napo common stock will represent only the right to receive the merger consideration as described above under " Merger Consideration." The conversion of Napo common stock into the right to receive the merger consideration will occur automatically at the effective time of the merger.

Prior to the completion of the merger, Jaguar will appoint an exchange agent for the purpose of exchanging certificates and book entry shares of Napo common stock and for the purpose of receiving the letter of transmittal from the Napo stockholders. If, on the Final Determination Date, the final number of Merger Shares that will be issued to the holders of contingent rights pursuant to the merger agreement is greater than zero, then within sixty (60) days after the Final Determination Date (sometimes referred to herein as the Contingent Right Holders Notice Date), the exchange agent will mail transmittal materials to each holder of record of shares of Napo common stock. This mailing will contain instructions for surrendering common stock certificates and book entry shares to the exchange agent in exchange for the merger consideration. Exchange of any book entry shares will be made in accordance with the exchange agent's customary procedures with respect to securities presented by book entry.

If there is a Final Determination that the number of Merger Shares that will be issued to the holders of contingent rights is greater than zero, each holder of a share of Napo common stock that has been converted into a contingent right to receive the shares of Jaguar common stock will receive

Table of Contents

such holder's pro rata share of the Merger Shares upon surrender to the exchange agent of the applicable Napo common stock certificate or book entry shares, together with a letter of transmittal covering such shares and such other documents as Jaguar or the exchange agent may reasonably require. Holders of Napo common stock should not send in their Napo stock certificates until they receive, complete and submit a signed letter of transmittal sent by the exchange agent with instructions for the surrender of Napo stock certificates.

After completion of the merger, there will be no further transfers on the stock transfer books of Napo except as required to settle trades executed prior to completion of the merger.

Termination of Exchange Fund

A year after the Contingent Right Holders Notice Date, Jaguar may require the exchange agent to deliver to Jaguar all contingent rights to receive shares of Jaguar common stock remaining in the exchange fund. Thereafter, holders of contingent rights must look only to Jaguar for payment of the merger consideration on their shares of Napo common stock.

Transfers of Ownership and Lost Stock Certificates

Jaguar will only issue the merger consideration and any dividends or distributions on Jaguar common stock that may be applicable in a name other than the name in which a surrendered Napo stock certificate is registered if the certificate is properly endorsed or otherwise in proper form and any applicable stock transfer taxes have been paid. If a certificate for Napo common stock has been lost, stolen or destroyed, the exchange agent will issue the consideration properly payable under the merger agreement upon receipt of appropriate evidence as to that theft, loss or destruction and customary indemnification.

No Liability

Napo and Jaguar are not liable to holders of shares of Napo common stock for any amount delivered to a public official under applicable abandoned property, escheat or similar laws.

Distributions with Respect to Unexchanged Shares

Holders of Napo common stock are not entitled to receive any dividends or other distributions on Jaguar common stock until the merger is completed and their contingent rights vest. After the merger is completed and assuming the contingent rights vest, holders of Napo common stock certificates will be entitled to dividends and other distributions declared or made after completion of the merger with respect to the number of whole shares of Jaguar common stock to which they are entitled upon exchange of their Napo stock certificates, but they will not be paid any dividends or other distributions on Jaguar common stock until they surrender their Napo stock certificates to the exchange agent in accordance with the exchange agent instructions and their contingent rights vest.

Appraisal Rights

Shares of Napo common stock held by any Napo stockholder that properly demands payment for its shares in compliance with the appraisal rights under Section 262 will not be converted into the right to receive the merger consideration. Napo stockholders properly exercising appraisal rights will be entitled to payment as described under "Appraisal Rights" beginning on page 249. However, if any Napo stockholder fails to perfect or otherwise waives, withdraws or loses the right to receive payment under Section 262, then that stockholder will not be paid in accordance with Section 262 and the shares of common stock held by that stockholder will be exchangeable solely for the right to receive the merger consideration.

Table of Contents

Reasonable Best Efforts; Other Agreements

Reasonable Best Efforts

Jaguar and Napo have agreed to use their reasonable best efforts to take, or cause to be taken, all reasonable actions, and do, or cause to be done, all reasonable things necessary and proper under applicable law to consummate and make effective the merger as promptly as practicable. Notwithstanding the foregoing, neither Jaguar, nor Napo shall be required, in connection with obtaining any approval or consent from any person (other than any governmental entity) with respect to the merger, to pay such person whose approval or consent is being solicited any cash or other consideration, make any accommodation or commitment or incur any liability or other obligation to such person (unless expressly required by a written agreement that was entered into prior to the date of the merger agreement with such person). In addition, without the prior written consent of Jaguar, Napo shall not sell, pledge, lease, assign, transfer, dispose of or encumber any property or assets, except (x) pledges and encumbrances on property or assets in the ordinary course of business consistent with past practice and (y) pledges and encumbrances on property or assets that would not be materially adverse to Napo's assets.

Joint proxy statement/prospectus; Stockholders' Meetings

Jaguar and Napo have agreed to cooperate in preparing and filing with the Securities and Exchange Commission this joint proxy statement/prospectus and the registration statement on Form S-4 of which it forms a part. Each has agreed to use its reasonable best efforts to resolve any Securities and Exchange Commission comments relating to this joint proxy statement/prospectus and to have the registration statement of which it forms a part declared effective, and will cause this joint proxy statement/prospectus to be mailed to its respective stockholders as early as practicable after it is declared effective. Each has also agreed to hold a stockholders' meeting as promptly as practicable after the registration statement is declared effective.

Other Agreements

The merger agreement contains certain other agreements, including agreements relating to access to information and cooperation between Jaguar and Napo during the pre-closing period, public announcements and certain tax matters.

Representations and Warranties

The merger agreement contains customary representations and warranties of Napo, which are subject to materiality and knowledge qualifications in many respects and which expire at the effective time of the merger. These representations and warranties relate to, among other things:

organization and qualification;

capitalization;

corporate power and authority, non-contravention;

no conflict, required filings and consents;

reports and financial statements;

compliance with applicable laws and permits;

absence of undisclosed liabilities;

absence of litigation;

employee benefit plans and ERISA compliance;

Table of Contents

labor and other employment matters;

title to assets, property;

tax matters;

environmental matters;

intellectual property;

material contracts and defaults;

agreements with regulatory agencies;

related party transactions;

insurance;

brokers and finders;

inapplicability of anti-takeover statutes; and

full disclosure.

The merger agreement also contains customary representations and warranties of Jaguar, which are subject to materiality and knowledge qualifications in many respects and which expire at the effective time of the merger. These representations and warranties relate to, among other things:

organization and qualification;

capitalization;

corporate power and authority, non-contravention;

no conflict, required filings and consents;

reports and financial statements, internal controls;

compliance with applicable laws and permits;

absence of undisclosed liabilities;

absence of litigation;

title to assets, property;

taxes;

environmental matters;

intellectual property rights;

agreements with regulatory agencies;

insurance;

brokers and finders;

inapplicability of anti-takeover statutes; and

full disclosure.

Conduct of Business Before Completion of the Merger

Napo and Jaguar have agreed to restrictions on their activities until the completion of the merger. In general, each of the parties has agreed to conduct its business in the ordinary course of business

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

consistent with past practice in all material respects and in compliance in all material respects with all applicable laws and use its commercially reasonable efforts to preserve its current business organization and goodwill.

Napo has also agreed that, except as expressly permitted by the merger agreement (including the Napo disclosure letter thereto) or with Jaguar's prior written consent, it will not (and will not permit any of its subsidiaries to):

amend or propose to amend its Certificate of Incorporation or bylaws;

split, combine, reclassify or subdivide any shares of its stock or other equity securities or ownership interests of Napo;

declare, set aside, make or pay any dividend or other distribution;

redeem, repurchase or otherwise acquire any shares of its capital stock, or other equity interests of Napo;

issue, sell, pledge, dispose of, encumber or grant any shares of its capital stock, or any options, warrants, convertible securities or other rights of any kind to acquire any shares of, its or its subsidiaries' capital stock or other equity interests, except that it may issue shares upon the vesting of RSUs or the exercise of stock options outstanding on the date of the agreement;

acquire or agree to acquire (including by merger, consolidation or acquisition of stock or assets) any real property, personal property, corporation, partnership, limited liability company, or other business organization or division or material amount of assets thereof other than in the ordinary course of business consistent with past practice;

sell, pledge, lease, assign, transfer, dispose of or encumber, or effect a deed in lieu of foreclosure with respect to, any property or assets, other than in the ordinary course of business consistent with past practice or pledges and encumbrances on property or assets that would not be materially adverse to the assets of Napo;

incur, create, assume refinance, replace or repay any indebtedness for borrowed money or issue or amend the terms of any debt securities or assume, guarantee or endorse or otherwise become responsible for the indebtedness of any other person;

enter into, renew, modify, amend or terminate, or waive, release, compromise or assign any rights or claims under, any material contract other than any termination or renewal in accordance with the terms of any existing material contract that occurs automatically without any action by Napo or may be reasonably necessary to comply with the terms of the merger agreement;

waive, release, or assign any material rights or claims or make any payment of any liability of Napo before the same comes due in accordance with its terms, other than in the ordinary course of business consistent with past practice;

settle or compromise any legal action, suit or arbitration proceeding, in each case made or pending against Napo including relating to taxes and any legal action, suit or proceeding involving any present, former or purposed holder or group of holders of its common stock;

hire or terminate any officer, director or employee of Napo or promote or appoint any person to a position of officer or director of Napo, increase in any manner the compensation or benefits of any of its directors, officers or employees, pay or agree to pay any pension, retirement, allowance or other compensation to any director, officer, employee or consultant of

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Napo or any of its subsidiaries, enter into, adopt, amend or terminate any employment, bonus, severance or retirement contract or other compensation or employee benefits arrangement, grant

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

any awards under any stock plan, bonus, incentive, performance or other compensation plan or arrangement, or take any action to fund or in any other way secure the payment of compensation or benefits under any stock plan, in each case, other than as required by law;

fail to maintain all financial books and records in all material respects in accordance with GAAP or make any material change to its methods of accounting in effect at December 31, 2016, except as required by a change in GAAP or in applicable law, or make any change, other than in the ordinary course of business consistent with past practice, with respect to accounting policies, unless required by GAAP or the SEC;

enter into any new line of business;

adopt a plan of merger, complete or partial liquidation or resolutions providing for or authorizing such merger, liquidation or a dissolution, consolidation, recapitalization or bankruptcy reorganization; or

authorize or enter into any contract, agreement, commitment or arrangement to do any of the foregoing.

Jaguar has agreed that, except as expressly permitted by the merger agreement or with Napo's prior written consent, it will not:

amend or propose to amend its Certificate of Incorporation or bylaws, except as provided for or contemplated in the merger agreement;

split, combine, reclassify or subdivide any shares of stock or other equity securities or ownership interests of Jaguar or Merger Sub;

declare, set aside or pay any dividend or other distribution with respect to shares of its capital stock or other equity securities or ownership interests in Jaguar;

redeem, repurchase or otherwise acquire any shares of its capital stock or other equity interests of Jaguar; or

sell, pledge, lease, assign, transfer, dispose of, or encumber, or effect a deed in lieu of foreclosure with respect to, any property or assets, other than pledges and encumbrances on property or assets in the ordinary course of business consistent with past practice or that would not be materially adverse to the assets of Jaguar on a consolidated basis;

fail to maintain all financial books and records in all material respects in accordance with GAAP or make any material change to its methods of accounting in effect as of the date of the merger agreement, except as required by a change in GAAP or in applicable law, or make any change, other than in the ordinary course of business consistent with past practice, with respect to accounting policies, unless required by GAAP or the SEC;

fail to duly and timely file all material reports and other material documents required to be filed with NASDAQ or any applicable governmental authority, subject to extensions permitted by applicable law or applicable rules and regulations;

except as contemplated in the merger agreement, adopt a plan of merger, complete or partial liquidation or resolutions providing for or authorizing such merger, liquidation or a dissolution, consolidation, recapitalization or bankruptcy reorganization, except in a manner that would not reasonably be expected to be adverse to Jaguar or to prevent or impair the ability of Jaguar to consummate the merger contemplated in the merger agreement; or

authorize or enter into any contract, agreement, commitment or arrangement to do any of the foregoing.

Table of Contents

Non-Solicitation

In the merger agreement, Napo has agreed that its board will recommend that Napo's stockholders adopt the merger agreement and approve the merger and that it will not directly or indirectly:

solicit, initiate or knowingly encourage or knowingly facilitate any inquiry, discussion offer or request that constitutes, or could reasonably be expected to lead to an acquisition of Napo (sometimes referred to herein as an Inquiry);

engage in any discussions or negotiations regarding, or furnish to any third party any non-public information in connection with, or knowingly facilitate in any way any effort by, any third party in furtherance of any Inquiry;

approve or recommend an acquisition of Napo, or enter into any letter of intent, memorandum of understanding, agreement in principle, acquisition agreement, merger agreement, share purchase agreement, asset purchase agreement, share exchange agreement, option agreement or other similar definitive agreement providing for or relating to an acquisition of Napo; or

propose or agree to do any of the foregoing.

Conditions to Completion of the Merger

Each party's obligation to effect the merger is subject to the satisfaction or waiver of various conditions, which include the following:

the adoption of the merger agreement by Napo stockholders;

the approval of (i) the issuance of shares of Jaguar common stock and non-voting common stock (Proposal 1), (ii) the amendment of the 2014 Plan (Proposal 4), and (iii) the adoption of Jaguar's Third Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 50 million shares to 225 million shares, authorize a class of non-voting common stock, require Nantucket's prior written consent before the issuance of dividends to holders of Jaguar common stock and/or non-voting common stock for so long as Nantucket or its affiliates own any shares of Jaguar non-voting common stock, and change the Jaguar corporate name to "Jaguar Health, Inc." (Proposal 5);

the absence of any law, order, decree, judgment, injunction or other legal restraint or prohibition entered, enacted, promulgated, enforced or issued by any governmental authority of competent jurisdiction making the merger illegal or otherwise preventing the consummation of the merger;

the effectiveness of the registration statement of which this joint proxy statement/prospectus is a part and the absence of any stop order or proceedings initiated for that purpose;

the approval of the listing of the Jaguar common stock to be issued in the merger on The NASDAQ Capital Market; and

the filing of the Third Amended and Restated Certificate of Incorporation with the Delaware Secretary of State.

Each of Jaguar's and Napo's obligations to complete the merger is also separately subject to the satisfaction or waiver of the following conditions:

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

the truth and correctness of the other party's representations and warranties, subject to certain materiality standards provided in the merger agreement;

the performance by the other party of its obligations under the merger agreement in all material respects;

Table of Contents

the delivery by the other party of an officer's certificate certifying that the conditions set forth in the two bullets above have been satisfied; and

there shall have been no material adverse effect on the other party.

The merger agreement provides that the conditions to the closing of the merger may be waived, in whole or in part, by Jaguar or Napo, to the extent legally allowed. Neither Jaguar nor Napo currently expects to waive any immaterial or material condition to the completion of the merger. If either Jaguar or Napo determines to waive any material condition to the merger and such waiver renders the disclosure in this joint proxy statement/prospectus materially misleading, proxies will be resolicited from the Jaguar and/or Napo stockholders, as applicable.

The merger agreement defines a material adverse effect on each party as a change, event, effect, violation, circumstance or other matter which, individually or in the aggregate with other changes, events, effects, violations, inaccuracies, circumstances or other matters, when considered on either a long-term basis or a short-term basis, has had or could reasonably be expected to have or give rise to a material adverse effect on: (i) the business, results of operations, condition (financial or otherwise), prospects, capitalization, liabilities, operations or financial performance or assets of the specified party; or (ii) the ability of the specified party to consummate the transactions contemplated by the merger agreement on a timely basis.

Termination

Generally, the merger agreement may be terminated and the merger may be abandoned at any time prior to the completion of the merger (including after stockholder approval) by mutual written consent of Jaguar and Napo. The agreement may also be terminated by either Jaguar or Napo if:

the merger is not consummated on or before June 30, 2017, except that such right is not available to any party whose failure to perform any of its obligations under the merger agreement has been the principal cause of, or resulted in, such failure;

a governmental entity issues a final and non-appealable order, decree or ruling or takes any other final and non-appealable action permanently restraining, enjoining or otherwise prohibiting the the transactions contemplated by the merger agreement, except that such right is not available to any party if the issuance of such final, non-appealable order was primarily due to the failure of such party to perform any of its obligations under the merger agreement;

the required Jaguar or Napo stockholder vote has not been obtained at the applicable stockholder meeting, or any adjournment or postponement thereof, except that such right is not available to any party if the failure to obtain such stockholder approval was primarily due to such party's failure to perform any of its obligations under the merger agreement;
or

the other party breaches or fails to perform in any material respect any of its representations, warranties, covenants or other agreements set forth in the merger agreement and such breach or non-performance cannot be cured on or before June 30, 2017, or if curable, is not cured by such other party within 20 days of receipt of written notice of such breach or failure, except that such right is not available to any party if such party is then in breach of any of its representations, warrants, covenants or agreements set forth in the merger agreement.

Termination Fee and Expenses

If the merger fails to close for any reason on, or prior to, July 31, 2017, other than as a result directly or indirectly of (x) lack of stockholder approval by either party or (y) Napo (i) fails to perform in accordance with the terms and conditions of the Binding Agreement of Terms or the merger documents or (ii) fails to abide by or breaches the provisions or representations, warranties and

Table of Contents

covenants of the Binding Agreement of Terms or the merger documents, then on, or before, the close of business on August 7, 2017, Jaguar will issue 2,000,000 shares of its restricted common stock to Napo.

Except as set forth above, whether or not the merger is completed, all costs and expenses incurred in connection with the merger agreement and the transactions contemplated by the merger agreement will be paid by the party incurring those costs or expenses.

Effect of Termination

If the merger agreement is terminated as described in " Termination" above, the agreement will become void and there will be no liability or obligation of any party, except that (i) both parties will remain liable for any fraud or willful and malicious breach of the merger agreement, and (ii) designated provisions of the merger agreement, including certain provisions relating to confidential treatment of information and fees and expenses (including the termination fees described above) will survive termination.

Amendment, Waiver and Extension of the Merger Agreement

Subject to applicable law, the merger agreement may be amended by the parties in writing at any time. However, after approval by Jaguar's stockholders of the transactions contemplated by the merger agreement, if any such amendment or waiver would require the approval of Jaguar's stockholders under applicable law or in accordance with the rules and regulations of NASDAQ, the effectiveness of such amendment or waiver will require further approval by Jaguar's stockholders.

At any time prior to the completion of the merger, each of the parties may extend the time for performance of any of the obligations or other acts of the other party to the merger agreement, waive any inaccuracies in the representations and warranties of the other party or waive compliance by the other party with any agreement or condition in the merger agreement.

Settlement Agreements and Investor Rights Agreement

Settlement Agreements

In order to induce Jaguar to enter into the merger agreement, on March 31, 2017, Napo entered into a settlement and discounted payoff agreement (sometimes referred to herein as the Nantucket Settlement Agreement) with the lenders party to the Financing Agreement and Nantucket, as collateral agent and administrative agent, pursuant to which Napo agreed, simultaneously with the consummation of the merger, (a) to make a cash payment to Nantucket of either \$8 million or \$8.5 million (depending upon the percentage of outstanding common stock represented by the shares released in the following clause (b)), which will reduce the outstanding principal obligations under the Financing Agreement, and (b) in satisfaction as a compromise for the outstanding obligations under the Financing Agreement and the release of any lien or security interest in respect of such outstanding obligations, (x) to transfer to Nantucket 2,666,666 shares of Jaguar common stock owned by Napo and (y) to cause Jaguar to issue to Nantucket 1,940,382 newly issued shares of Jaguar voting common stock and 38,380,028 newly issued shares of Jaguar non-voting common stock, which shares are subject to the terms of the Investor Rights Agreement described below.

Napo also entered into settlement agreements with certain additional creditors on or about March 31, 2017, pursuant to which Napo agreed to cause Jaguar to issue in the aggregate 4,722,567 shares of Jaguar non-voting common stock and warrants to purchase 1,237,283 shares of Jaguar common stock, with an exercise price of \$0.08 per share, to such creditors upon consummation of the merger as a complete settlement and satisfaction of Napo's outstanding obligations to such creditors. Jaguar also agreed to register the resale of these shares on one or more registration statements.

Table of Contents

Investor Rights Agreement

In connection with the execution of the merger agreement and the Nantucket Settlement Agreement, Jaguar and Nantucket entered into the Investor Rights Agreement, dated March 31, 2017, pursuant to which, among other things, Jaguar agreed to register the resale of the shares issued to Nantucket pursuant to the Nantucket Settlement Agreement on one or more registration statements. A portion of the shares issued to Nantucket pursuant to the Nantucket Settlement Agreement will be held in escrow and released to either Nantucket or the former Napo stockholders, depending on whether Nantucket receives sufficient proceeds from the resale of the Tranche A Shares to third parties to satisfy the applicable Hurdle Amount. Examples illustrating the calculation of the number of shares released from escrow to Nantucket or the former Napo stockholders, as the case may be, and a summary of the Hurdle Amounts at different time periods are set forth in *Annex E* and *Annex F*, respectively, to this joint proxy statement/prospectus. The Investor Rights Agreement also provides that Jaguar cannot pay any dividends on any shares of its capital stock or redeem any shares, except in limited circumstances, without the prior written consent of Nantucket.

Table of Contents

**UNAUDITED PRO FORMA
COMBINED CONDENSED FINANCIAL STATEMENTS**

The unaudited pro forma combined condensed balance sheet as of December 31, 2016 is presented as if the proposed merger had occurred as of December 31, 2016. The unaudited pro forma combined condensed statement of operations for the year ended December 31, 2016 is presented as if the merger had occurred on January 1, 2016. The pro forma consolidated financial statements of Jaguar and Napo have been adjusted to reflect certain reclassifications in order to conform Napo's historical financial statement presentation to Jaguar's financial statement presentation for the combined company.

The unaudited pro forma combined condensed financial statements give effect to the merger under the acquisition method of accounting in accordance with Financial Accounting Standards Board Accounting Standard Topic 805, *Business Combinations*, which is sometimes referred to herein as ASC 805, with Jaguar treated as the acquirer. As of the date of this filing, Jaguar has not completed the detailed valuation work necessary to arrive at the required estimates of the fair value of the Napo assets to be acquired and the liabilities to be assumed and the related allocation of purchase price, nor has it identified all adjustments necessary to conform Napo's accounting policies to Jaguar's accounting policies. A final determination of the fair value of Napo's assets and liabilities, including intangible assets with both indefinite or finite lives, will be based on the actual net tangible and intangible assets and liabilities of Napo that exist as of the closing date of the merger and, therefore, cannot be made prior to the completion of the merger. In addition, the value of the consideration to be paid by Jaguar upon the consummation of the merger will be determined based on the closing price per share of Jaguar common stock on the closing date of the merger. As a result of the foregoing, the pro forma adjustments are preliminary and are subject to change as additional information becomes available and as additional analyses are performed. The preliminary pro forma adjustments have been made solely for the purpose of presenting the unaudited pro forma combined condensed financial statements. Jaguar estimated the fair value of Napo's assets and liabilities as of December 31, 2016 is based on preliminary valuation studies and due diligence. Until the merger is completed, both companies are limited in their ability to share certain information. Therefore, information necessary for the complete valuation is not currently available and, accordingly, management has used its best estimates based upon information currently available. Upon completion of the merger, final valuations will be performed based on the actual net tangible and intangible assets of Napo that will exist on the date of the merger. The final purchase price allocation may be different than that reflected in the pro forma purchase price allocation presented herein, and this difference may be material.

Assumptions and estimates underlying the unaudited adjustments to the pro forma combined condensed financial statements are described in the accompanying notes, which should be read in conjunction with the unaudited pro forma combined condensed financial statements. The historical consolidated financial statements have been adjusted in the unaudited pro forma combined condensed financial statements to give effect to pro forma events that are: (1) directly attributable to the merger; (2) factually supportable; and (3) with respect to the unaudited pro forma combined condensed statements of operations, expected to have a continuing impact on the combined results of Jaguar and Napo following the merger.

In connection with the plan to integrate the operations of Jaguar and Napo, Jaguar anticipates that non-recurring charges, such as costs associated with systems implementation, relocation expenses, severance and other costs related to closing the transaction, will be incurred. Jaguar is not able to determine the timing, nature and amount of these charges as of the date of this joint proxy statement/prospectus. However, these charges could affect the combined results of operations of Jaguar and Napo, as well as those of the combined company following the merger, in the period in which they are recorded. The unaudited pro forma combined condensed financial statements do not include the effects of the costs associated with any restructuring or integration activities resulting from the transaction, as they are non-recurring in nature and not factually supportable at the time that the unaudited pro forma

Table of Contents

combined condensed financial statements were prepared. Additionally, these adjustments do not give effect to any synergies that may be realized as a result of the merger, nor do they give effect to any nonrecurring or unusual restructuring charges that may be incurred as a result of the integration of the two companies.

Table of Contents

**UNAUDITED PRO FORMA COMBINED CONDENSED BALANCE SHEETS
OF JAGUAR AND NAPO
As of December 31, 2016**

On March 31, 2017, Napo Pharmaceuticals, Inc. ("Napo") entered into a merger agreement with Napo Acquisition Company, a wholly-owned subsidiary of Jaguar Animal Health, Inc. ("Jaguar" or the "Company"), ("Merger") in which Napo will survive the Merger as a wholly owned subsidiary of the Company. The unaudited pro forma condensed combined statements of operations for the year ended December 31, 2016 are presented as if the Merger had occurred on January 1, 2016. The unaudited pro forma condensed combined balance sheet is presented as if the Merger had occurred on December 31, 2016. The unaudited pro forma condensed combined financial statements presented herein are based on the historical financial statements of Jaguar and Napo using the acquisition method of accounting and applying the assumptions and adjustments described in the accompanying notes. In addition, the unaudited pro forma condensed combined financial information should be read in conjunction with the:

Separate audited historical financial statements of Jaguar as of and for the year ended December 31, 2016, and the related notes, included in the Annual Report on Form 10-K for the year ended December 31, 2016, filed by Jaguar with the Securities and Exchange Commission ("SEC").

Separate audited historical financial statements of Napo as of and for the year ended December 31 2016, and the related notes included in this joint proxy statement/prospectus.

The unaudited pro forma condensed combined financial statements do not give effect to the potential impact of current financial conditions, regulatory matters, operating efficiencies or other savings or expenses that may be associated with the Merger. The unaudited pro forma condensed combined financial statements also do not include any future integration costs. The unaudited pro forma condensed combined financial statements have been prepared for illustrative purposes only and are not necessarily indicative of the financial position or results of operations in future periods or the results that would have been realized had Jaguar and Napo been a combined company during the specified periods. There was one transaction between Jaguar and Napo during the period presented in the unaudited pro forma condensed combined financial statements that would need to be eliminated. This entry was for an employee lease transaction payable to Jaguar from Napo in the amount of \$299,648.

Table of Contents

Unaudited Pro Forma Condensed Combined Balance Sheet
As of December 31, 2016

	Historical Jaguar	Historical Napo	Pro Forma Adjustments	Notes	Pro Forma Combined
Assets					
Current assets:					
Cash and cash equivalents	950,979	2,271,745	2,000,000	(a)	5,222,723
Restricted cash	511,293				511,293
Accounts receivable, net	4,963	166,937			171,900
Due from Napo	299,648		(299,648)	(b)	
Inventory	412,754	982,838	122,967	(f)	1,518,559
In Process R&D/Developed technology			57,200,000	(c)	57,200,000
Goodwill			26,982,255	(d)	26,982,255
Deferred offering costs	72,710				72,710
Prepaid expenses	302,694	64,670			367,364
Total current assets	2,555,041	3,486,190	86,005,574		92,046,805
Property and equipment, net	885,945				885,945
Land		396,247			396,247
Investment		1,919,999	(1,919,999)	(b)	
Other assets	122,163				122,163
Total assets	3,563,149	5,802,436	84,085,575		93,451,160
Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)					
Current liabilities:					
Accounts payable	517,000	4,316,819	174,188	(a)(f)	5,008,007
Deferred revenue	224,454	464,892	(116,223)	(f)	573,123
Line of credit		250,000			250,000
Convertible notes payable	150,000				150,000
Payable to Jaguar Animal Health		299,648	(299,648)	(b)	
Accrued expenses	582,522	4,861,232	(4,491,565)	(a)(f)	952,189
Warrant liability	799,201				799,201
Current portion of long-term debt	1,919,675				1,919,675
Total current liabilities	4,192,852	10,192,591	4,733,248		9,652,195
Deferred tax liability			22,782,760	(g)	22,782,760
Long-term debt, net of discount	1,817,526	54,497,580	(42,392,610)	(a)(b)	13,985,496
Deferred rent	6,956				6,956
Total liabilities	6,017,334	64,690,171	(24,280,098)		46,427,407
Commitments and Contingencies					
Stockholders' Equity (Deficit):					
Common stock	1,401	10,819	(10,011)	(a)(e)	2,209
Common stock Tranche A			1,848	(a)	1,848
Common stock Tranche B			1,990	(a)	1,990
Common stock Tranche C			194	(a)	194
Additional paid-in capital	37,980,522	98,539,747	(53,769,831)	(a)(e)	82,750,438
Accumulated deficit	(40,436,108)	(157,438,301)	162,141,482	(e)	(35,732,927)
Total stockholders' (equity)	(2,454,185)	(58,887,735)	108,365,673		47,023,753
	3,563,149	5,802,436	84,085,875		93,451,160

**Total liabilities, convertible preferred stock and stockholders' equity
(deficit)**

272

Table of Contents

Unaudited Pro Forma Condensed Combined Statement of Operations
For the year ended December 31, 2016

	Historical Jaguar	Historical Napo	Pro Forma Adjustments	Notes	Pro Forma Combined
Revenue	\$ 141,523	\$ 987,312	\$		\$ 1,128,835
Operating expenses:					
Cost of revenue	51,966	726,506			778,472
Research and development	7,206,864	127,137			7,334,001
Selling and marketing	485,440	730,252			1,215,692
General and administrative	5,983,238	1,995,673	2,126,667	(f)	10,105,578
Total operating expenses	13,727,508	3,579,568	2,126,667		19,433,743
Loss from operations	(13,585,985)	(2,592,256)	(2,126,667)		(18,304,908)
Interest expense	(985,549)	(15,609,092)	14,554,770	(b)(f)	(2,039,871)
Other income (expense), net	(11,046)				(11,046)
Gain (Loss) on extinguishment of debt	(108,000)				(108,000)
Impairment of equity method investment in related party		(574,059)	574,059	(b)	
Gain on litigation settlement		1,888,319			1,888,319
Change in fair value of warrants	(43,200)				(43,200)
Loss from equity method investment in related party		(3,505,940)	3,505,940	(b)	
Net loss and comprehensive loss	\$ (14,733,780)	\$ (20,393,028)	\$ 16,508,103		\$ (18,618,706)
Net loss per common share, basic and diluted	\$ (1.35)				\$ (0.28)
Weighted-average shares used in computing net	10,951,178				67,095,960

Table of Contents

Basis of Presentation

On March 31, 2017, Jaguar Animal Health, Inc., a Delaware corporation (the "Jaguar"), entered into an Agreement and Plan of Merger (the "Merger Agreement") with Napo Pharmaceuticals, Inc., a Delaware corporation ("Napo"), Napo Acquisition Corporation, a Delaware corporation and wholly owned subsidiary of Jaguar ("Merger Sub"), and a Napo representative, pursuant to which, among other things, subject to the satisfaction or waiver of the conditions set forth in the Merger Agreement, Merger Sub will merge with and into Napo, with Napo becoming a wholly-owned subsidiary of Jaguar and the surviving corporation of the merger (the "Merger"). Napo is a privately-held company based in San Francisco, California focused on licensing, developing, and commercialization of proprietary specialty pharmaceuticals for the global marketplace in collaboration with development partners.

Subject to the terms and conditions of the Merger Agreement, at the closing of the Merger, (i) each issued and outstanding share of Napo common stock (other than dissenting shares and shares held by Jaguar or Napo) will be converted into a contingent right to receive up to a whole number of shares of Jaguar common stock comprising in the aggregate no more than approximately 21.5% and no less than 17.4% of the fully diluted shares of Jaguar common stock immediately following the consummation of the merger (holders of such Contingent Rights, the "Contingent Right Holders"), which contingent right will vest only if the subsequent resale of certain shares of Jaguar common stock ("the Tranche A Shares") issued by Jaguar to Nantucket Investments Limited ("Nantucket") in the Napo debt settlement described further below provides Nantucket with specified cash returns upon the subsequent sale of their Tranche A Shares to third parties over a specified period of time (the "Hurdle Amounts"), (ii) existing creditors of Napo (inclusive of Nantucket) will be issued in the aggregate approximately 43,156,649 shares of Jaguar non-voting common stock and 2,005,245 shares of Jaguar voting common stock in full satisfaction of all existing indebtedness then owed by Napo to such creditors and (iii) an existing Napo stockholder will be issued an aggregate of approximately 3,243,243 shares of Jaguar common stock in return for \$3 million of new funds invested into Jaguar by such investor, which will be immediately loaned to Napo to partially facilitate the extinguishment of the debt that Napo owes to Nantucket. At closing, it is contemplated that unless consented to or waived by Jaguar, Napo will have no more than (x) \$11.3 million in secured and unsecured debt for monies borrowed (a portion of such debt proceeds which will be used to pay off Napo's secured debt owed to Nantucket), (y) \$6.2 million of trade payables and certain other debt, excluding transaction expenses and (z) Napo's cash at closing shall be no less than \$500,000.

Shares of Jaguar non-voting common stock have the same rights to dividends and other distributions and are convertible into shares of common stock on a one-for-one basis upon (x) transfers to non-affiliates of Nantucket, (y) the release from escrow of certain non-voting shares held by Nantucket to the legacy stockholders of Napo under specified conditions and (z) at any time on or after April 1, 2018 at the option of the respective holders thereof.

Jaguar will also assume (i) each outstanding and unexercised option to purchase Napo common stock, which will be converted into options to purchase Jaguar common stock, (ii) each outstanding warrant to purchase Napo capital stock, which will be converted into warrants to purchase Jaguar common stock, and (iii) each outstanding restricted stock unit to acquire Napo capital stock, which will be converted into restricted stock units to acquire Jaguar common stock.

The stockholders of Jaguar will continue to own their existing shares and the rights and privileges of their existing shares will not be affected by the merger. However, because Jaguar will be issuing new shares of Jaguar common stock and non-voting common stock to Napo creditors, and options, warrants and restricted stock units exercisable for Jaguar common stock to holders of Napo options, warrants and restricted stock units in the merger, the stockholders of Jaguar will experience dilution as a result of the issuance of shares in the merger and each outstanding share of Jaguar common stock immediately prior to the merger will represent a smaller percentage of the total number of shares of

Table of Contents

Jaguar common stock and non-voting common stock issued and outstanding after the merger. It is expected that Jaguar stockholders and option and warrant holders before the merger will hold approximately 25% of the total Jaguar common stock and non-voting common stock issued and outstanding on a fully diluted basis ("Jaguar Equity Holders") immediately following completion of the merger. Thus, Jaguar Equity Holders before the merger will experience dilution in the amount of approximately 75% as a result of the merger.

The unaudited pro forma condensed combined balance sheet at December 31, 2016 gives effect to the merger as if it had occurred on December 31, 2016. The unaudited pro forma condensed combined statement of operations for the year ended December 31, 2016 is presented as if the Merger had occurred on January 1, 2016. The unaudited pro forma condensed combined financial information was prepared using the acquisition method of accounting, based on the historical financial statements of Jaguar and Napo.

Acquisition of Napo

The Merger was accounted for using the acquisition method of accounting with the Company treated as the accounting acquirer. The purchase price was preliminarily allocated based on the estimated fair value of net assets acquired and liabilities assumed. The preliminary purchase price allocation is subject to further refinement and may require adjustments, such as related to changes in the value of stock issued, liabilities assumed and intangible assets acquired, and changes in working capital and indebtedness, to arrive at the final purchase price allocation.

The acquisition consideration was comprised of (in thousands):

Stock	48,392
Cash	2,000
	\$ 50,392

Under the acquisition method of accounting, certain identifiable assets and liabilities of Napo including identifiable intangible assets, inventory, debt and deferred revenue were recorded based on their estimated fair values as of the effective time of the Merger. Tangible and other assets and liabilities were valued at their respective carrying amounts, which management believes approximate their fair values.

The fair value of in-process research and development ("IPR&D") and developed technology ("DT") was determined using the income approach, which was based on forecasts prepared by management. The fair value of the IPR&D will be capitalized as of the closing date of the Merger and will be subsequently accounted for as an indefinite-lived intangible asset until completion or abandonment of the associated research and development efforts. Accordingly, during the development period after the closing date, these assets will not be amortized but will be subject to periodic impairment testing. Upon successful completion of the development process for the acquired IPR&D project, determination of the useful life of the asset will be made and amortization of the asset would begin over its remaining estimated useful life.

Goodwill which represents the purchase price in excess of the fair value of net assets acquired, is not expected to be deductible for income tax purposes. Goodwill will not be amortized but will be tested for impairment at least annually or whenever certain indicators of impairment are present. If, in the future, it is determined that goodwill is impaired, an impairment charge would be recorded at that time.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

The fair value of the assets acquired and liabilities, assuming the Merger had closed on December 31, 2016, are summarized below (in thousands)

Cash and cash equivalents	\$	2,272
Other assets		1,737
In Process R&D/Developed Technology		57,200
Goodwill		26,982
Accrued liabilities		(2,848)
Long-term Debt		(12,168)
Deferred tax liability		(22,783)
Total net assets acquired	\$	50,392

2. Pro Forma Adjustments

Pro forma adjustments are necessary to reflect the acquisition consideration exchanged and to adjust amounts related to the tangible and intangible assets and liabilities of Napo to reflect the preliminary estimate of their fair values, and to reflect the impact on the statements of operations of the Merger as if the companies had been combined during the periods presented therein. The pro forma adjustments included in the unaudited pro forma condensed combined financial statements are as follows:

- a. To record the issuance of 45,161,895 shares of the Company's common stock; and to record the receipt of \$3.0 million proceeds from the issuance of 3,243,243 shares, of which \$2.0 million was used to pay off Napo debt.
- b. To record Napo's convertible debt assumed by Jaguar at its fair value of \$12.2 million; to record the settlement of \$52.6 million of Napo debt through the issuance of 42,987,077 Company shares and \$8.0 million in cash; to eliminate Napo's investment in Jaguar transferred to settle Napo debt; eliminate the interest of \$15.6 million on Napo's historical convertible debt not assumed by Jaguar; to eliminate a receivable/payable of \$0.3 million between Napo and Jaguar; to eliminate Napo impairment of equity method investment in related party; and to eliminate Napo's loss from equity method investment in related party.
- c. To record the estimated fair value of Napo's IPR&D and other intangible assets acquired.
- d. To record goodwill.
- e. To eliminate Napo's historical equity amounts consisting of common stock, paid-in capital, and accumulated deficit.
- f. To eliminate transactions costs of \$100,000 included in Jaguar's statement of operations to record \$2.6 million of estimated transaction costs in the balance sheet; to record interest expense of \$1.0 million on the assumed convertible debt; to record amortization expense of \$2.2 million on the acquired intangible assets; to fair value Napo inventory; to eliminate a liability of \$2.5 million to be settled through future royalties; and to record the elimination of the gross margin in Napo deferred revenue.
- g. To record a deferred tax liability of \$22.8 million related to the acquired IPR&D and other intangible assets.

3) Non-Recurring Transaction Costs

The Company and Napo have incurred and the Company will continue to incur, certain non-recurring transaction expenses in connection with the Merger. Non-recurring transaction expenses incurred by Napo and the Company, were \$100,000 during the year ended December 31, 2016 and are reflected as an adjustment to reduce general and administrative expenses in the pro-forma condensed combined statement of

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

operations as they are non-recurring and directly attributable to the Merger. The Company incurred \$2.6 million in transaction costs subsequent to December 31, 2016 and the expenses have been included in accounts payable on the pro forma balance sheet

Table of Contents

DESCRIPTION OF JAGUAR CAPITAL STOCK

General

The following is a summary of the rights of Jaguar's common stock and preferred stock and of certain provisions of Jaguar's second amended and restated certificate of incorporation and amended and restated bylaws. This summary is not complete. For more detailed information, please see the second amended and restated certificate of incorporation and amended and restated bylaws which have been publicly filed with the SEC. See "Where You Can Find More Information."

Our authorized capital stock consists of 60,000,000 shares, all with a par value of \$0.0001 per share, of which 50,000,000 shares are designated as common stock and 10,000,000 shares are designated as preferred stock.

Common Stock

As of the date of this joint proxy statement/prospectus, Jaguar had 14,424,128 shares of common stock outstanding and zero shares of preferred stock outstanding.

As of the date of this joint proxy statement/prospectus, Jaguar had 30 record holders of common stock.

As of the date of this joint proxy statement/prospectus, there were outstanding options to purchase 2,426,596 shares of Jaguar common stock with a weighted-average exercise price of \$2.60 per share and outstanding RSUs for 20,789 shares of Jaguar common stock.

As of the date of this joint proxy statement/prospectus, there were outstanding warrants exercisable for 6,339,792 shares of Jaguar common stock with a weighted-average exercise price of \$1.35 per share.

Voting Rights

The holders of Jaguar common stock are entitled to one vote per share on all matters to be voted on by Jaguar stockholders. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by Jaguar's board of directors out of funds legally available for that purpose. In the event of Jaguar's liquidation, dissolution or winding up, the holders of Jaguar common stock are entitled to share ratably in all assets remaining after the payment of liabilities, subject to the prior distribution rights of preferred stock then outstanding. Holders of Jaguar common stock have no preemptive, conversion or subscription rights. There are no redemption or sinking fund provisions applicable to the Jaguar common stock.

Dividends

Subject to preferences that may be applicable to any outstanding Jaguar preferred stock, holders of Jaguar common stock are entitled to receive dividends, if any, as may be declared from time to time by Jaguar's board of directors out of legally available funds.

Liquidation

In the event of Jaguar's liquidation, dissolution or winding up, holders of Jaguar common stock will be entitled to share ratably in the net assets legally available for distribution to Jaguar stockholders after the payment of all of Jaguar's debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of Jaguar preferred stock.

Table of Contents

Rights and Preferences

Holders of Jaguar common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to the Jaguar common stock. The rights, preferences and privileges of the holders of Jaguar common stock are subject to and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that Jaguar may designate in the future.

Fully Paid and Nonassessable

All of Jaguar's outstanding shares of common stock are fully paid and nonassessable.

Preferred Stock

Jaguar's board of directors has the authority, without further action by Jaguar stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the number, rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and sinking fund terms, and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of Jaguar preferred stock could adversely affect the voting power of holders of Jaguar common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of Jaguar preferred stock could have the effect of delaying, deferring or preventing a change of control or other corporate action. Jaguar has no current plan to issue any shares of preferred stock.

Warrants

As of the date of this joint proxy statement/prospectus, Jaguar had outstanding warrants to purchase an aggregate of 6,339,792 shares of Jaguar common stock, 207,664 of which are exercisable at a price of \$2.53 per share, and expire on February 5, 2019; 16,666 of which are exercisable at a price of \$6.30 per share, and expire June 26, 2019; 178,569 of which are exercisable at a price of \$5.60 per share and expire June 3, 2020; 58,035 of which are exercisable at a price of \$5.60 per share and expire December 31, 2017; 111,605 of which are exercisable at a price of \$5.60 per share and expire December 31, 2017; 143,000 of which are exercisable at a price of \$8.75 per share, and expire on May 13, 2020; 120,000 of which are exercisable at a price of \$0.01 per share and expire on or before July 28, 2022; 1,800,001 of which are exercisable at a price of \$0.75 per share, and expire on May 29, 2022; 1,666,668 of which are exercisable at a price of \$0.90 per share, and expire on November 29, 2017; 1,666,668 of which are exercise at a price of \$1.00 per share, and expire on May 29, 2018; and 370,916 of which are exercisable at a price of \$0.51 per share, and expire on January 31, 2019.

Registration Rights

Pursuant to the Registration Rights Agreement, dated November 22, 2016, Jaguar is required to file one or more registration statements as permissible and necessary to register under the Securities Act, the resale of the shares of Jaguar common stock and shares of Jaguar common stock underlying warrants sold to the investors pursuant to the securities purchase agreement, dated November 22, 2016, between Jaguar and certain institutional investors.

Pursuant to the Registration Rights Agreement, dated June 8, 2016, Jaguar is required to file one or more registration statements as permissible and necessary to register under the Securities Act, the resale of the shares of Jaguar common stock sold to Aspire Capital under the CSPA.

Pursuant to the Note Purchase Agreement, dated March 1, 2017, by and among Napo, MEF I, LP and Riverside Merchant Partners, Napo is required to include in the merger agreement provisions,

Table of Contents

consistent with the terms set forth in Annex II of the Note Purchase Agreement, that Jaguar register the shares of Jaguar common stock issuable upon exchange of the Exchangeable Promissory Notes issuable thereunder.

Pursuant to the Amended and Restated Note Purchase Agreement, dated March 31, 2017, by and among Napo, Kingdon Associates, M. Kingdon Offshore Master Fund L.P. and Kingdon Family Partnership, L.P., Jaguar is required to register the shares of Jaguar common stock issuable upon conversion of the Conversion Stock (as defined therein), together with any shares of Jaguar common stock issuable in connection with interest payments under the Convertible Promissory Notes issuable thereunder.

Anti-Takeover Effects of Delaware Law and Jaguar's Certificate of Incorporation and Bylaws

Delaware Law

Certain provisions of Delaware law and Jaguar's second amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of Jaguar. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids. These provisions are also designed in part to encourage anyone seeking to acquire control of Jaguar to negotiate with Jaguar's board of directors. Jaguar believes that the advantages gained by protecting Jaguar's ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of Jaguar common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Second Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Jaguar's second amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

require that any action to be taken by Jaguar's stockholders be effected at a duly called annual or special meeting and not by written consent;

specify that special meetings of Jaguar's stockholders can be called only by Jaguar's board of directors, the chairman of Jaguar's board of directors, the chief executive officer or the president;

establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of Jaguar's stockholders, including proposed nominations of persons for election to Jaguar's board of directors;

provide that directors may be removed only for cause;

provide that vacancies on Jaguar's board of directors may be filled only by a majority of directors then in office, even though less than a quorum;

establish that Jaguar's board of directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered terms;

specify that no stockholder is permitted to cumulate votes at any election of Jaguar's board of directors; and

require approval of the stockholders of at least 75% of the shares and a majority of the board of directors to amend certain of the above-mentioned provisions.

Table of Contents

Exclusive Jurisdiction

Under the provisions of Jaguar's second amended and restated certificate of incorporation, unless Jaguar consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for: (i) any derivative action or proceeding brought on behalf of Jaguar; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of Jaguar's directors, officers or other employees or agents to Jaguar or Jaguar's stockholders; (iii) any action asserting a claim against Jaguar arising pursuant to any provision of the Delaware General Corporation Law or Jaguar's second amended and restated certificate of incorporation or amended and restated bylaws; or (iv) any action asserting a claim against Jaguar governed by the internal affairs doctrine. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with any action, a court could find the choice of forum provisions contained in Jaguar's second amended and restated certificate of incorporation to be inapplicable or unenforceable in such action.

Delaware Anti-Takeover Statute

Jaguar is subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

prior to the date of the transaction, Jaguar's board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

upon the closing of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not for determining the outstanding voting stock owned by the interested stockholder, (1) shares owned by persons who are directors and also officers, and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

at or subsequent to the date of the transaction, the business combination is approved by Jaguar's board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66²/₃% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. Jaguar expects the existence of this provision to have an anti-takeover effect with respect to transactions Jaguar's board of directors does not approve in advance. Jaguar also anticipates that Section 203 may discourage business combinations or other attempts that might result in the payment of a premium over the market price for the shares of Jaguar common stock held by Jaguar's stockholders.

The provisions of Delaware law and Jaguar's second amended and restated certificate of incorporation and amended and restated bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of Jaguar common stock that often result from actual or rumored takeover attempts. These provisions may also have the effect of preventing changes in Jaguar's management. It is possible

Table of Contents

that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Transfer Agent and Registrar

The transfer agent and registrar for Jaguar common stock is Computershare Trust Company N.A. The transfer agent and registrar's address is 250 Royall St., Canton, MA 02021. The transfer agent's telephone number is (800) 962-4284.

Listing

Jaguar common stock is listed on The NASDAQ Capital Market under the symbol "JAGX." On August 22, 2016, Jaguar received notice from NASDAQ, which indicated that under NASDAQ Listing Rule 5550(b)(1), Jaguar is required to maintain a minimum of \$2,500,000 in stockholders' equity for continued listing. For the year ended December 31, 2016, Jaguar reported stockholders' deficit of \$2,454,185. Based on the plan submitted by the Company to regain compliance, the SEC granted the Company an extension until February 21, 2017 to regain compliance.

On February 22, 2017, Jaguar received a letter from NASDAQ stating that NASDAQ determined that Jaguar did not meet the terms of the extension and that Jaguar's securities are subject to delisting from NASDAQ unless Jaguar timely requests a hearing before the NASDAQ Hearings Panel. Jaguar has timely requested a hearing before the Panel, at which Jaguar will present its plan to satisfy the \$2,500,000 stockholders' equity requirement (or the alternatives of market value of listed securities of \$35 million or net income from continuing operations) and request the continued listing of its common stock on NASDAQ pending its return to compliance. Jaguar's timely request for a hearing has stayed any delisting action by NASDAQ and Jaguar's securities will continue to trade on The NASDAQ Capital Market under the symbol "JAGX" at least pending the ultimate outcome of the hearing and the expiration of any extension period that may be granted by the Panel in response to Jaguar's request for continued listing on NASDAQ.

On December 28, 2016, Jaguar received notice from NASDAQ, which indicated that Jaguar's closing bid price was less than \$1.00 per share for 30 consecutive business days. Jaguar has a 180 calendar day grace period, or until June 26, 2017, to regain compliance with the minimum bid price requirement. The minimum bid price requirement will be met if Jaguar common stock has a minimum closing bid price of at least \$1.00 per share for a minimum of 10 consecutive business days during the 180 calendar day grace period. On March 7, 2017, Jaguar received notice from NASDAQ that Jaguar had regained compliance with the minimum bid price requirement.

Table of Contents

COMPARISON OF RIGHTS OF JAGUAR AND NAPO STOCKHOLDERS

Both Jaguar and Napo are incorporated under the laws of the State of Delaware and, accordingly, the rights of the stockholders of each are currently, and will continue to be, governed by the DGCL. Before the consummation of the merger, the rights of holders of Napo common stock are also governed by the Fourth Amended and Restated Certificate of Incorporation of Napo, as amended, and the amended and restated bylaws of Napo. After the consummation of the merger and assuming the resale of the Tranche A Shares to third parties provides Nantucket with sufficient proceeds to satisfy the Hurdle Amounts, Napo stockholders will become stockholders of Jaguar, and their rights will be governed by the DGCL, the Third Amended and Restated Certificate of Incorporation of Jaguar (assuming the stockholders of Jaguar approve the proposed adoption of the Third Amended and Restated Certificate of Incorporation), and the amended and restated bylaws of Jaguar.

The following is a summary of the material differences between the rights of Jaguar stockholders and the rights of Napo stockholders. While we believe that this summary covers the material differences between the two, this summary may not contain all of the information that is important to you. This summary is not intended to be a complete discussion of the respective rights of Jaguar and Napo stockholders and is qualified in its entirety by reference to the DGCL and the various documents of Jaguar and Napo that we refer to in this summary. You should carefully read this entire joint proxy statement/prospectus and the other documents we refer to in this joint proxy statement/prospectus for a more complete understanding of the differences between being a stockholder of Napo and being a stockholder of Jaguar. Jaguar has filed its documents referred to herein with the Securities and Exchange Commission. For more information on how to obtain these documents, see the section titled "Where You Can Find More Information."

Jaguar Stockholder Rights

Authorized Capital Stock

Napo Stockholder Rights

Jaguar is authorized to issue:

Napo is authorized to issue:

175,000,000 shares of common stock assuming the stockholders of Jaguar approve Jaguar's proposed Third Amended and Restated Certificate of Incorporation to increase the number of shares of common stock, of which 14,424,128 were issued and outstanding as of March 31, 2017.

175,000,000 shares of common stock, of which 108,202,786 shares were issued and outstanding as of March 31, 2017.

50,000,000 shares of non-voting common stock, of which none were issued and outstanding as of March 31, 2017 (assuming the stockholders of Jaguar approve Jaguar's proposed Third Amended and Restated Certificate of Incorporation creating a class of non-voting common stock).

10,000,000 shares of preferred stock, of which none were issued and outstanding as of March 31, 2017.

The Jaguar Board is authorized to issue the preferred stock in one or more series.

Table of Contents

Jaguar Stockholder Rights

Under Jaguar's Third Amended and Restated Certificate of Incorporation and amended and restated bylaws, each holder of common stock is entitled to vote in person or by and proxy and shall have one vote for each share of common stock held by such stockholder.

Under Jaguar's Third Amended and Restated Certificate of Incorporation and amended and restated bylaws, each holder of non-voting common stock is not entitled to vote, except on an as converted basis with respect to any change of control that is submitted to the stockholders of Jaguar for approval.

Voting Rights

Under Napo's Fourth Amended and Restated Certificate of Incorporation, as amended, and amended and restated bylaws, at any meeting of Napo stockholders, each stockholder is entitled to vote in person or by and proxy and shall have one vote for each share having voting power held by such stockholder.

Napo Stockholder Rights

Quorum

Under Jaguar's amended and restated bylaws, the holders of a majority of the stock issued and outstanding and entitled to vote at the meeting, present in person, or by remote communication, if applicable, or represented by proxy, shall constitute a quorum at all meetings of the stockholders, except where otherwise provided by statute, the Certificate of Incorporation or the bylaws.

Under Napo's amended and restated bylaws, the holders of a majority of the shares entitled to vote at the meeting, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders.

Stockholder Rights Plans

Jaguar is not a party to a rights plan.

Napo is not a party to a rights plan.

Number of Directors

Jaguar's amended and restated bylaws provide that the number of directors shall be determined from time to time by resolution of the Jaguar Board, provided that the Jaguar Board shall consist of at least one member.

Napo's amended and restated bylaws provide that the board of directors must consist of not less than three directors and not more than seven directors, with the exact number of directors to be determined by the Napo Board or Napo stockholders from time to time.

Currently, there are seven directors on the Jaguar Board. After the merger, the Jaguar Board will be comprised of the same seven members.

Table of Contents

Jaguar Stockholder Rights

Napo Stockholder Rights

Filling Vacancies on the Board of Directors

Under Jaguar's Third Amended and Restated Certificate of Incorporation and amended and restated bylaws, vacancies, including those resulting from death, resignation or removal, and newly created directorships resulting from an increase in the number of directors will be filled by a majority of the remaining members of the Jaguar Board, even if less than a quorum, unless the Jaguar Board determines by resolution that any such vacancy or newly created directorship will be filled by the Jaguar stockholders..

Under Napo's amended and restated bylaws, vacancies, including those resulting from death, resignation or removal, and newly created directorships resulting from an increase in the number of directors may be filled solely by a majority of the remaining members of the Napo Board, even if less than a quorum.

Removal of Directors

Under Jaguar's Third Amended and Restated Certificate of Incorporation and amended and restated bylaws, the Jaguar Board or any individual director may be removed from office only for cause and only by the affirmative vote of at least 75% in voting power of the outstanding shares of capital stock of Jaguar entitled to vote thereon.

Under Napo's amended and restated bylaws, the entire Napo Board or any individual director may be removed from office only in the manner and within the limitations provided by the DGCL. Under Section 141(k) of the DGCL, except in certain circumstances not applicable to Napo, any director or the entire board may be removed by holders of a majority of the shares then entitled to vote at an election of directors.

Stockholder Nominations and Proposals

Jaguar's amended and restated bylaws provide that in order for a stockholder to make any director nomination or propose business at a Jaguar annual stockholders meeting, the stockholder must (i) provide timely notice in writing to Jaguar's Secretary and (ii) provide all updates and supplements to such notice, which must be received not later than five business days after the record date for determining the stockholders entitled to notice of the meeting (in the case of the update and supplement required to be made as of the record date) and not later than eight business days prior to the date of the meeting (in the case of the update and supplement required to be made as of ten business days prior to the meeting).

Neither Napo's Fourth Amended Certificate of Incorporation, as amended, nor Napo's amended and restated bylaws specify how stockholders are to make director nominations or propose business. However, Napo's amended and restated bylaws provides that a special meeting of stockholders may be called for any purpose at any time by one or more stockholders holding shares in the aggregate entitled to cast not less than 10% of the votes at that meeting. Written notice of any special meeting of stockholders must be given not less than ten nor more than sixty days before the date of the meeting.

Table of Contents

Jaguar Stockholder Rights

Napo Stockholder Rights

Jaguar's amended and restated bylaws provide that if the election of directors is a matter specified in the notice of meeting given by or at the direction of the person calling such special meeting, then for a stockholder to make any director nominations at a special meeting, the stockholder must (i) provide timely notice in writing to Jaguar's Secretary and (ii) provide all updates and supplements to such notice, which must be received not later than five business days after the record date for determining the stockholders entitled to notice of the meeting (in the case of the update and supplement required to be made as of the record date) and not later than eight business days prior to the date of the meeting (in the case of the update and supplement required to be made as of ten business days prior to the meeting).

Stockholder Action by Written Consent

Pursuant Jaguar's amended and restated bylaws, any action required or permitted to be taken by the stockholders of Jaguar must be effected at a duly called annual or special meeting of stockholders of Jaguar and may not be effected by any consent in writing by such stockholders.

Pursuant Napo's amended and restated bylaws, any action required or permitted to be taken by the stockholders of Napo must be effected at a duly called annual or special meeting of stockholders of Napo and may not be effected by any consent in writing by such stockholders.

Amendments to Certificate of Incorporation

Jaguar's Third Amended and Restated Certificate of Incorporation provides that the corporation may amend, alter, change or repeal any provision contained in the Certificate of Incorporation in the manner prescribed by statute. Under Delaware law, an amendment to a Certificate of Incorporation generally requires the approval of the board of directors and the approval of the holders of a majority of the issued and outstanding stock entitled to vote upon the proposed amendment.

Napo's Fourth Amended and Restated Certificate of Incorporation, as amended, may be amended as provided by statute. Under Delaware law, an amendment to a Certificate of Incorporation generally requires the approval of the board of directors and the approval of the holders of a majority of the issued and outstanding stock entitled to vote upon the proposed amendment.

Table of Contents

Jaguar Stockholder Rights

Napo Stockholder Rights

Bylaw Amendments

The Jaguar Board is expressly authorized to make, alter, amend or repeal the bylaws. In addition, the bylaws may be amended, altered or repealed, and new bylaws may be adopted, by the stockholders entitled to vote.

Napo's amended and restated bylaws may be adopted, amended or repealed (i) by stockholders holding at least a majority of the voting power of all outstanding shares of capital stock of Napo or (ii) by Napo's board; provided, however, in each case that Article X (Pre-Emption Rights on Issues of New Shares for Cash) of Napo's amended and restate bylaws may only be amended by vote of 75% of stockholders eligible to vote and who vote.

Special Meetings of Stockholders

Under Jaguar's amended and restated bylaws, special meetings of the stockholders may be called only by Jaguar's board, the chairman of the board, the chief executive officer or the president (in the absence of a chief executive officer).

Under Napo's amended and restated bylaws, special meetings of stockholders may be called for any purpose at any time by (i) Napo's board, (ii) the chairman of the board, (iii) the chief executive officer, or (iv) by one or more stockholders holding shares in the aggregate entitled to cast not less than 10% of the votes at that meeting.

Limitation of Personal Liability of Directors

Except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, Jaguar's Third Amended and Restated Certificate of Incorporation eliminates personal liability to Jaguar and its stockholders for monetary damages for breach of fiduciary duty as a director. Jaguar's Third Amended and Restated Certificate of Incorporation also provides that if the DGCL is amended to permit further elimination or limitation of the personal liability of directors, then the liability of a director of Jaguar shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Napo's Fourth Amended and Restated Certificate of Incorporation, as amended, eliminates personal liability of a director to Napo and its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for a breach of the director's duty of loyalty to Napo or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL (which creates liability for unlawful payment of dividends and unlawful stock purchases or redemptions) or (iv) for any transaction from which the director derived any improper personal benefit. Napo's Fourth Amended and Restated Certificate of Incorporation further provides that if the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of Napo shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Table of Contents

Jaguar Stockholder Rights

Napo Stockholder Rights

Indemnification

Jaguar's Third Amended and Restated Certificate of Incorporation and amended and restated bylaws provide that Jaguar shall indemnify its officers and directors to the fullest extent permitted by applicable law against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred; provided, however, that Jaguar shall not be required to indemnify any officer or director in connection with any proceeding initiated by such person unless the proceeding was authorized by Jaguar's board of directors.

Napo's Fourth Amended and Restated Certificate of Incorporation and amended and restated bylaws provide that Napo shall indemnify its officers, directors and employees to the fullest extent permitted by applicable law against all liability and loss suffered and expenses reasonably incurred by such person; provided, however, that Napo shall not be required to indemnify any officer, director or employee in connection with any proceeding initiated by such person unless the proceeding was authorized by Napo's board of directors.

Jaguar's amended and restated bylaws includes the right to advancement of expenses; provided, however, that an advancement of expenses incurred by a director or officer shall be made only upon receipt of an undertaking by the director or officer to repay all amounts so advanced if it shall ultimately be determined by final judicial decision that the officer or director is not entitled to indemnification for such expenses.

Napo's amended and restated bylaws includes the right to advancement of expenses; provided, however, that an advancement of expenses incurred by a director or officer shall be made only upon receipt of an undertaking by the director or officer to repay all amounts so advanced if it shall ultimately be determined that the officer or director is not entitled to indemnification for such expenses.

Jaguar's Third Amended and Restated Certificate of Incorporation further provide that Jaguar shall have the power to indemnify its employees and other agents against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred.

Business Combinations

Jaguar's Third Amended and Restated Certificate of Incorporation does not contain any provision requiring a supermajority vote of stockholders for business combinations.

Napo's Fourth Amended and Restated Certificate of Incorporation does not contain any provision requiring a supermajority vote of stockholders for business combinations.

Forum for Adjudication of Disputes

Jaguar's amended and restated bylaws designates the Court of Chancery of the State of Delaware to be the sole and exclusive forum for stockholder claims unless Jaguar consents in writing to the selection of an alternative forum; provided that, if and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware.

Neither Napo's Fourth Amended and Restated Certificate of Incorporation nor its amended and restated bylaws contain any provision designating a sole and exclusive forum for stockholder claims.

Table of Contents

APPRAISAL RIGHTS

In connection with the merger, record holders of Napo common stock will be entitled to appraisal rights if the merger is completed. Under Section 262, as a result of completion of the merger, holders of shares of Napo common stock, with respect to which appraisal rights are properly demanded and perfected and not withdrawn or lost, are entitled, in lieu of receiving the merger consideration, to have the "fair value" of their shares at the effective time of the merger (exclusive of any element of value arising from the accomplishment or expectation of the merger) judicially determined and paid to them in cash by complying with the provisions of Section 262. Napo is required to send a notice to that effect to each stockholder not less than 20 days prior to the special meeting. This joint proxy statement/prospectus constitutes that notice to you.

The following is a brief summary of Section 262, which sets forth the procedures for demanding statutory appraisal rights. This summary is qualified in its entirety by reference to Section 262, a copy of the text of which is attached to this joint proxy statement/prospectus as *Annex D*. The following summary does not constitute any legal or other advice nor does it constitute a recommendation that stockholders exercise their appraisal rights under Section 262.

A stockholder who desires to exercise appraisal rights must (i) not vote in favor of the adoption of the merger agreement, (ii) deliver in the manner set forth below a written demand for appraisal of the stockholder's shares to the Corporate Secretary of Napo before the vote on the adoption of the merger agreement at the special meeting at which the proposal to adopt the merger agreement will be submitted to Napo's stockholders, (iii) continuously hold the shares of record from the date of making the demand through the effective time of the merger, and (iv) otherwise comply with the requirements of Section 262. Within 10 days after the effective time of the merger, the surviving corporation must provide notice of the effective time to all stockholders who have complied with Section 262 and not voted in favor of the merger.

Only a holder of record of Napo common stock is entitled to demand an appraisal of the shares registered in that holder's name. If shares are owned of record in a fiduciary capacity, such as by a trustee, guardian or custodian, such demand must be executed by the fiduciary. If shares are owned of record by more than one person, as in a joint tenancy or tenancy in common, the demand must be executed by all joint owners. An authorized agent, including an agent of two or more joint owners, may execute the demand for appraisal for a stockholder of record; however, the agent must identify the record owner and expressly disclose that, in exercising the demand, the agent is acting as agent for the record owner.

A record owner, such as a broker, who holds shares as a nominee for others may exercise appraisal rights with respect to the shares held for all or less than all beneficial owners of shares as to which the holder is the record owner. In that case, the written demand must set forth the number of shares covered by the demand. Where the number of shares is not expressly stated, the demand will be presumed to cover all shares outstanding in the name of the record owner.

Beneficial owners who are not record owners and who intend to exercise appraisal rights must act promptly to cause the record holder to follow the steps summarized herein properly and in a timely manner to perfect appraisal rights. Shares held through brokerage firms, banks and other financial institutions are frequently deposited with and held of record in the name of a nominee of a central security depository. Any holder of shares desiring appraisal rights with respect to such shares who held such shares through a brokerage firm, bank or other financial institution is responsible for ensuring that the demand for appraisal is made by the record holder. The stockholder should instruct such firm, bank or institution that the demand for appraisal must be made by the record holder of the shares, which might be the nominee of a central security depository if the shares have been so deposited.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

As required by Section 262, a demand for appraisal must be in writing and must reasonably inform Napo of the identity of the record holder (which might be a nominee as described above) and of such holder's intention to seek appraisal of such shares.

Stockholders of record who elect to demand appraisal of their shares must mail or deliver their written demand to: Napo Pharmaceuticals, Inc., 201 Mission Street, Suite 2375, San Francisco, CA 94105, Attention: Corporate Secretary. The written demand must be received by Napo prior to the taking of the vote on the merger. Neither voting (in person or by proxy) against, abstaining from voting on or failing to vote on the proposal to adopt the merger agreement and approve the merger will alone suffice to constitute a written demand for appraisal within the meaning of Section 262. In addition, the stockholder seeking to demand appraisal must not vote its shares of stock in favor of adoption of the merger agreement. Because a proxy that does not contain voting instructions will, unless revoked, be voted in favor of adoption of the merger agreement, it will constitute a waiver of the stockholder's right of appraisal and will nullify any previously delivered written demand for appraisal. Therefore, a stockholder who wishes to exercise appraisal rights must vote against the adoption of the merger agreement, abstain from voting on the adoption of the merger agreement or refrain from executing and submitting the enclosed proxy card.

Within 120 days after the effective time of the merger, but not thereafter, either the surviving corporation in the merger or any stockholder who has timely and properly demanded appraisal of such stockholder's shares and who has complied with the requirements of Section 262 and is otherwise entitled to appraisal rights, or any beneficial owner for which a demand for appraisal has been properly made by the record holder, may commence an appraisal proceeding by filing a petition in the Delaware Court of Chancery, with a copy served on the surviving corporation in the case of a petition filed by a stockholder, demanding a determination of the fair value of the shares of all stockholders who have properly demanded appraisal.

There is no present intent on the part of the surviving corporation to file an appraisal petition and stockholders seeking to exercise appraisal rights should not assume that the surviving corporation will file such a petition or that the surviving corporation will initiate any negotiations with respect to the fair value of such shares. Accordingly, stockholders who desire to have their shares appraised should initiate any petitions necessary for the perfection of their appraisal rights within the time periods and in the manner prescribed in Section 262. Within 120 days after the effective time of the merger, any stockholder who has theretofore complied with the applicable provisions of Section 262 will be entitled, upon written request, to receive from the surviving corporation a statement setting forth the aggregate number of shares of common stock not voting in favor of the merger and with respect to which demands for appraisal were received by the surviving corporation and the number of holders of such shares. A person who is the beneficial owner of shares held in a voting trust or by a nominee on behalf of such person may, in such person's own name, file a petition or request from the corporation the statement described in the previous sentence. Such statement must be mailed within 10 days after the written request therefor has been received by the surviving corporation.

If a petition for an appraisal is timely filed, at the hearing on such petition, the Delaware Court of Chancery will determine which stockholders are entitled to appraisal rights. The Delaware Court of Chancery may require the stockholders who have demanded an appraisal for their shares and who hold stock represented by certificates to submit their certificates of stock to the Register in Chancery for notation thereon of the pendency of the appraisal proceedings; and if any stockholder fails to comply with such direction, the Delaware Court of Chancery may dismiss the proceedings as to such stockholder. Where proceedings are not dismissed, the appraisal proceeding shall be conducted, as to the shares of common stock owned by such stockholders, in accordance with the rules of the Delaware Court of Chancery, including any rules specifically governing appraisal proceedings.

Table of Contents

After a hearing on such petition, the Delaware Court of Chancery will determine which stockholders are entitled to appraisal rights and thereafter will appraise the shares owned by those stockholders, determining the fair value of the shares exclusive of any element of value arising from the accomplishment or expectation of the merger, together with interest to be paid, if any, upon the amount determined to be the fair value. Unless the Delaware Court of Chancery in its discretion determines otherwise for good cause shown, interest from the effective date of the merger through the date of payment of the judgment shall be compounded quarterly and shall accrue at 5% over the Federal Reserve discount rate (including any surcharges) as established from time to time during the period between the effective date of the merger and the date of payment of the judgment. In determining fair value, the Delaware Court of Chancery is required to take into account all relevant factors. In *Weinberger v. UOP, Inc.*, the Delaware Supreme Court discussed the factors that could be considered in determining fair value in an appraisal proceeding, stating that "proof of value by any techniques or methods which are generally considered acceptable in the financial community and otherwise admissible in court" should be considered and that "[f]air price obviously requires consideration of all relevant factors involving the value of a company." The Delaware Supreme Court stated that in making this determination of fair value the court must consider "market value, asset value, dividends, earnings prospects, the nature of the enterprise and any other facts which were known or which could be ascertained as of the date of merger which throw any light on future prospects of the merged corporation." The Delaware Supreme Court construed Section 262 to mean that "elements of future value, including the nature of the enterprise, which are known or susceptible of proof as of the date of the merger and not the product of speculation, may be considered." However, the Delaware Supreme Court noted that Section 262 provides that fair value is to be determined "exclusive of any element of value arising from the accomplishment or expectation of the merger."

Stockholders considering seeking appraisal should bear in mind that the fair value of their shares determined under Section 262 could be more than, the same as, or less than the merger consideration they are entitled to receive pursuant to the merger agreement if they do not seek appraisal of their shares, and that opinions of investment banking firms as to the fairness from a financial point of view of the consideration payable in a transaction are not opinions as to, and do not address, fair value under Section 262. Neither Jaguar nor Napo anticipates offering more than the merger consideration to any Napo stockholder exercising appraisal rights, and reserves the right to assert, in any appraisal proceeding, that for purposes of Section 262, the "fair value" of a share of Napo common stock is less than the merger consideration.

The cost of the appraisal proceeding may be determined by the Delaware Court of Chancery and charged upon the parties as the Delaware Court of Chancery deems equitable in the circumstances. However, costs do not include attorneys' and expert witness fees. Each dissenting stockholder is responsible for his or her attorneys' and expert witness fees although upon application of a stockholder seeking appraisal rights, the Delaware Court of Chancery may order that all or a portion of the expenses incurred by such stockholder in connection with the appraisal proceeding, including, without limitation, reasonable attorneys' fees and the fees and expenses of experts, be charged pro rata against the value of all shares entitled to appraisal. In the absence of such a determination of assessment, each party bears its own expenses.

Any stockholder who has duly demanded appraisal in compliance with Section 262 will not, after the effective time of the merger, be entitled to vote for any purpose any shares subject to such demand or to receive payment of dividends or other distributions on such shares, except for dividends or distributions payable to stockholders of record at a date prior to the effective time of the merger.

At any time within 60 days after the effective time of the merger, any stockholder who has demanded appraisal and who has not commenced an appraisal proceeding or joined that proceeding as a named party, shall have the right to withdraw such stockholder's demand for appraisal and to accept the contingent right to receive Jaguar common stock as provided for in the merger agreement by

Table of Contents

delivering to the surviving corporation a written withdrawal of such stockholder's demand for appraisal and acceptance of the merger consideration. After this period, the stockholder may withdraw such stockholder's demand for appraisal only with the consent of the surviving corporation. If no petition for appraisal is filed with the Delaware Court of Chancery within 120 days after the effective time of the merger, all stockholders' rights to appraisal shall cease and all stockholders shall be entitled only to receive the merger consideration as provided for in the merger agreement. Inasmuch as the parties to the merger agreement have no obligation to file such a petition, and have no present intention to do so, any stockholder who desires that such petition be filed is advised to file it on a timely basis. No appraisal proceeding in the Delaware Court of Chancery shall be dismissed as to any stockholders without the approval of the Delaware Court of Chancery, and that approval may be conditioned upon such terms as the Delaware Court of Chancery deems just. However, the preceding sentence will not affect the right of any stockholder who has not commenced an appraisal proceeding or joined the proceeding as a named party to withdraw such stockholder's demand for appraisal and to accept the terms offered upon the merger within 60 days after the effective time of the merger.

The foregoing is a brief summary of Section 262 that sets forth the procedures for demanding statutory appraisal rights. This summary, however, is not a complete statement of all applicable requirements and is qualified in its entirety by reference to Section 262, a copy of the text of which is attached as *Annex D* to this joint proxy statement/prospectus.

A stockholder's failure to comply with all the procedures set forth in Section 262 will result in the loss of such stockholder's statutory appraisal rights. Consequently, if you wish to exercise your appraisal rights, you should consider consulting a legal advisor.

Table of Contents

TRADEMARK NOTICE

Jaguar Animal Health, Jaguar's logo, Canalevia and Neonorm are Jaguar's trademarks that are used in this joint proxy statement/prospectus. This joint proxy statement/prospectus also includes trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, trademarks and tradenames referred to in this joint proxy statement/prospectus appear without the ©, ® or ™ symbols, but those references are not intended to indicate that Jaguar will not assert, to the fullest extent under applicable law, Jaguar's rights or that the applicable owner will not assert its rights, to these trademarks and tradenames.

LEGAL MATTERS

The validity of the Jaguar common stock and non-voting common stock will be passed upon for Jaguar by Reed Smith LLP, Palo Alto, California.

EXPERTS

The financial statements of Jaguar as of December 31, 2016 and 2015 and for each of the two years in the period ended December 31, 2016 incorporated by reference in this prospectus and the registration statement have been so incorporated in reliance on the reports of BDO USA, LLP, an independent registered public accounting firm (the reports on the financial statements contains an explanatory paragraph regarding Jaguar's ability to continue as a going concern), incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

The consolidated financial statements of Napo as of December 31, 2016 and 2015 and for each of the two years in the period ended December 31, 2016 appearing in this registration statement have been audited by Macias Gini & O'Connell LLP, as stated in their report appearing elsewhere in the registration statement (which report contains an explanatory paragraph regarding Napo's ability to continue as a going concern), and are included in reliance upon such report and upon the authority of such firm as experts in auditing and accounting.

STOCKHOLDER PROPOSALS

Jaguar

In accordance with SEC Rule 14a-8, in order for stockholder proposals intended to be presented at the 2018 Annual Meeting of Stockholders to be eligible for inclusion in Jaguar's proxy statement and the form of proxy for such meeting, they must be received by Jaguar at Jaguar's executive offices in San Francisco, California, before December 18, 2017. Jaguar's Board of Directors has not determined the date of the 2018 Annual Meeting of Stockholders, but does not currently anticipate that the date will be changed by more than 30 calendar days from the date of this year's annual meeting.

Napo

Napo will hold a 2017 annual meeting of stockholders only if the merger is not completed. Any proposal of a stockholder of Napo that is intended to be presented by such stockholder at Napo's 2017 annual meeting of stockholders (if it is held) must have been received by Napo, such proposal may be considered if written notice of such proposal is timely received by Napo's Secretary. Generally, a notice is timely given if received by Napo's Secretary not less than 90 or more than 120 days before the date of the annual meeting.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

Jaguar files annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any of this information at the Securities and Exchange Commission's public reference room at 100 F Street, N.E., Washington, D.C. 20549. Please call the Securities and Exchange Commission at 1-800-SEC-0330 or 202-942-8090 for further information on the public reference room. The Securities and Exchange Commission also maintains an Internet website that contains reports, proxy statements and other information regarding issuers, including Jaguar, who file electronically with the Securities and Exchange Commission. The address of that site is <http://www.sec.gov>. Jaguar's Internet website is www.jaguaranimalhealth.com, and Jaguar makes available free of charge at such website Jaguar's annual reports, quarterly reports, current reports, reports filed pursuant to Section 16 of the Exchange Act and amendments to those reports as soon as reasonably practical after such reports are electronically filed or furnished to the Securities and Exchange Commission.

Jaguar has filed with the Securities and Exchange Commission a registration statement on Form S-4 of which this joint proxy statement/prospectus is a part. The registration statement registers the shares of Jaguar common stock to be issued to Napo stockholders (assuming the resale of the Tranche A shares to third parties provides Nantucket with sufficient proceeds to satisfy the Hurdle Amounts) and creditors in connection with the merger, together with shares of Jaguar common stock that may be issued upon conversion of the Jaguar non-voting common stock that will be issued in connection with the merger. The registration statement, including the attached exhibits and annexes, contains additional relevant information about the common stock and non-voting common stock of Jaguar and the common stock of Napo.

Napo is not required to and does not file periodic reports with the Securities and Exchange Commission.

This document is a prospectus of Jaguar and is a joint proxy statement of Jaguar and Napo for the Jaguar special meeting and the Napo special meeting. Neither Jaguar nor Napo has authorized anyone to give any information or make any representation about the merger or Jaguar or Napo that is different from, or in addition to, that contained in this joint proxy statement/prospectus. Therefore, if anyone does give you information of this sort, you should not rely on it. The information contained in this document speaks only as of the date of this document unless the information specifically indicates that another date applies.

Table of Contents

**Jaguar Animal Health, Inc.
Index to Financial Statements**

	Page
Audited Financial Statements	
<u>Report of Independent Registered Public Accounting Firm</u>	<u>F-2</u>
<u>Balance Sheets as of December 31, 2016 and 2015</u>	<u>F-3</u>
<u>Statements of Comprehensive Loss for the years ended December 31, 2016 and 2015</u>	<u>F-4</u>
<u>Statement of Changes in Common Stock, Convertible Preferred Stock and Stockholders' (Deficit) for the period from December 31, 2014 through December 31, 2016</u>	<u>F-5</u>
<u>Statements of Cash Flows for the years ended December 31, 2016 and 2015</u>	<u>F-6</u>
<u>Notes to Audited Financial Statements</u>	<u>F-7</u>

**Napo Pharmaceuticals, Inc.
Index to Consolidated Financial Statements**

	Page
Audited Financial Statements	
<u>Independent Auditor's Report</u>	<u>F-41</u>
<u>Consolidated Balance Sheets as of December 31, 2016 and 2015</u>	<u>F-42</u>
<u>Consolidated Statements of Operations for the years ended December 31, 2016 and 2015</u>	<u>F-43</u>
<u>Consolidated Statement of Changes in Common Stock and Stockholders' Equity (Deficit) for the years ended December 31, 2016 and 2015</u>	<u>F-44</u>
<u>Consolidated Statements of Cash Flows for the years ended December 31, 2016 and 2015</u>	<u>F-45</u>
<u>Notes to Consolidated Financial Statements</u>	<u>F-46</u>

Table of Contents

Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders
Jaguar Animal Health, Inc.
San Francisco, California

We have audited the accompanying balance sheets of Jaguar Animal Health, Inc. as of December 31, 2016 and 2015 and the related statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for each of the two years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As described in Note 1 to the financial statements, the Company has suffered recurring losses from operations and has an accumulated deficit that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our opinion is not modified with respect to this matter.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Jaguar Animal Health, Inc. at December 31, 2016 and 2015, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

/s/ BDO USA, LLP

San Francisco, California
February 15, 2017

Table of Contents**Jaguar Animal Health, Inc.****Balance Sheets**

	December 31, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	\$ 950,979	\$ 7,697,531
Restricted cash	511,293	
Accounts receivable	4,963	55,867
Due from former parent	299,648	3,199
Inventory	412,754	229,871
Deferred offering costs	72,710	143,231
Prepaid expenses	302,694	324,083
Total current assets	2,555,041	8,453,782
Property and equipment, net	885,945	829,232
Restricted cash		3,000,000
Other assets	122,163	122,163
Total assets	\$ 3,563,149	\$ 12,405,177
Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)		
Current liabilities:		
Accounts payable	\$ 517,000	\$ 574,462
License fee payable to former parent		425,000
Deferred revenue	224,454	251,936
Convertible notes payable	150,000	150,000
Accrued expenses	582,522	798,434
Warrant liability	799,201	
Current portion of long-term debt	1,919,675	1,707,899
Total current liabilities	4,192,852	3,907,731
Long-term debt, net of discount	1,817,526	4,095,028
Deferred rent	6,956	3,321
Total liabilities	\$ 6,017,334	\$ 8,006,080
Commitments and Contingencies (See note 6)		
Stockholders' Equity (Deficit):		
Preferred stock: \$0.0001 par value, 10,000,000 shares authorized at December 31, 2016 and December 31, 2015; no shares issued and outstanding at December 31, 2016 and December 31, 2015.		
Common stock: \$0.0001 par value, 50,000,000 shares authorized at December 31, 2016 and December 31, 2015; 14,007,132 and 8,124,923 shares issued and outstanding at December 31, 2016 and December 31, 2015, respectively.		
	1,401	812
Additional paid-in capital	37,980,522	30,100,613
Accumulated deficit	(40,436,108)	(25,702,328)
Total stockholders' equity (deficit)	(2,454,185)	4,399,097
Total liabilities, convertible preferred stock and stockholders' equity (deficit)	\$ 3,563,149	\$ 12,405,177

The accompanying notes are an integral part of these financial statements.

F-3

Table of Contents**Jaguar Animal Health, Inc.****Statements of Operations and Comprehensive Loss**

	Years Ended December 31,	
	2016	2015
Revenue	\$ 141,523	\$ 258,381
Operating Expenses		
Cost of revenue	51,966	123,457
Research and development expense	7,206,864	6,475,851
Sales and marketing expense	485,440	765,091
General and administrative expense	5,983,238	5,339,351
Total operating expenses	13,727,508	12,703,750
Loss from operations	(13,585,985)	(12,445,369)
Interest expense, net	(985,549)	(3,317,287)
Other income/(expense)	(11,046)	(27,277)
Change in fair value of warrants	(43,200)	(501,617)
Loss on extinguishment of debt	(108,000)	
Net loss and comprehensive loss	(14,733,780)	(16,291,550)
Accretion of redeemable convertible preferred stock		(346,374)
Net loss attributable to common stockholders	\$ (14,733,780)	\$ (16,637,924)
Net loss per share attributable to common stockholders, basic and diluted	\$ (1.35)	\$ (2.70)
Weighted-average common shares outstanding, basic and diluted	10,951,178	6,153,139

The accompanying notes are an integral part of these financial statements.

Table of Contents**Jaguar Animal Health, Inc.****Statement of Changes in Common Stock, Convertible Preferred Stock and Stockholders' Equity (Deficit)**

	Series A Convertible Preferred Stock		Common Stock		Additional paid-in capital	Accumulated deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount			
Balances December 31, 2014	3,015,902	\$ 7,304,914	2,874,330	\$ 288	\$ 1,175,242	\$ (9,410,778)	\$ (8,235,248)
Issuance of common stock in initial public offering, net of discounts and commissions of \$1,209,802, offering costs of \$2,897,825 and offering costs in the form of common stock warrants of \$400,400			2,860,000	286	15,511,974		15,512,260
Warrant, issued in conjunction with the initial public offering					400,400		400,400
Conversion of preferred stock into common stock upon initial public offering	(3,015,902)	(7,651,288)	2,010,596	201	7,651,087		7,651,288
Conversion of preferred stock warrant liability into additional paid-in capital upon initial public offering					1,150,985		1,150,985
Conversion of convertible notes into common stock upon initial public offering			374,997	37	2,099,963		2,100,000
Stock-based compensation					992,165		992,165
Beneficial conversion feature on notes payable					1,202,521		1,202,521
Deemed dividends on Series A		263,060			(263,060)		(263,060)
Accretion of issuance costs		83,314			(83,314)		(83,314)
Napo license fee abatement					250,000		250,000
Issuance of common stock upon exercise of stock options			5,000		12,650		12,650
Net and comprehensive loss						(16,291,550)	(16,291,550)
Balances December 31, 2015		\$	8,124,923	\$ 812	\$ 30,100,613	\$ (25,702,328)	\$ 4,399,097
Issuance of common stock in a secondary public offering, net of discounts and commissions of \$373,011 and offering costs of \$496,887 February 2016			2,000,000	200	4,129,902		4,130,102
Issuance of common stock in a private investment in public entities offering, net of offering costs of \$105,398 June 2016.			2,027,490	203	2,571,099		2,571,302
Issuance of common stock in a private investment in public entities offering October 2016			170,455	17	149,983		150,000
Issuance of common stock and equity warrants in a private investment in public entities offering, net of warrant liability of \$700,001 and net of offering costs of \$96,833 November 2016			1,666,668	167	203,000		203,167
Warrants, issued in conjunction with debt extinguishment					108,000		108,000
Issuance of common stock in exchange for vested restricted stock units			17,596	2	(2)		
Stock-based compensation					717,927		717,927
Net and comprehensive loss						(14,733,780)	(14,733,780)
Balances December 31, 2016		\$	14,007,132	\$ 1,401	\$ 37,980,522	\$ (40,436,108)	\$ (2,454,185)

The accompanying notes are an integral part of these financial statements.

Table of Contents**Jaguar Animal Health, Inc.****Statements of Cash Flow**

	Years Ended December 31,	
	2016	2015
Cash Flows from Operating Activities		
Net loss	\$ (14,733,780)	\$ (16,291,550)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation expense	47,494	5,155
Gain/loss on disposal of fixed assets		34,549
Loss on extinguishment of debt	108,000	
Materials cost in connection with license activity		6,287
Issuance costs in connection with warrants issued in the November 2016 private investment in public entity	39,200	
Stock-based compensation	717,927	992,165
Amortization of debt issuance costs and debt discount	510,085	2,720,668
Change in fair value of warrants	43,200	501,617
Changes in assets and liabilities		
Accounts receivable trade	50,904	(55,867)
Inventory	(182,883)	(31,842)
Prepaid expenses	21,389	(299,913)
Deferred offering costs	(72,710)	
Other long-term assets		(122,163)
Due from parent	(296,449)	(19,780)
Deferred revenue	(27,482)	228,134
Deferred rent	3,635	3,321
License fee payable	(425,000)	(1,200,000)
Accounts payable	(28,336)	(240,087)
Accrued expenses	(188,912)	(546,557)
Total cash used in operations	(14,413,718)	(14,315,863)
Cash Flows from Investing Activities		
Purchase of equipment	(104,207)	(23,300)
Sale of equipment		20,600
Change in restricted cash	2,488,707	(3,000,000)
Total cash provided by/(used in) investing activities	2,384,500	(3,002,700)
Cash Flows from Financing Activities		
Proceeds from issuance of long-term debt		5,615,543
Repayment of long-term debt	(2,488,706)	
Proceeds from issuance of redeemable convertible notes payable, net		1,250,000
Repayment of convertible notes payable		(100,000)
Repayment of notes payable		(1,000,000)
Proceeds from issuance of common stock in initial public offering, net of commissions and discounts		18,810,484
Deferred offering costs		(417,775)
Proceeds from issuance of common stock in follow-on secondary public offering, net of commissions, discounts	5,000,000	
Commissions, discounts and issuance costs associated with the follow-on secondary public offering	(869,898)	
Proceeds from issuance of common stock in a private investment in public entities June 2016	2,676,746	
Issuance costs associated with the proceeds from the issuance of common stock in a private investment in public entities June 2016	(105,444)	
Proceeds from the issuance of common stock in a private investment in public entities October 2016	150,000	
Proceeds from the issuance of common stock in a private investment in public entities November 2016	1,000,001	
Issuance costs associated with the proceeds from the issuance of common stock in a private investment in public entities November 2016	(80,033)	
Proceeds from the exercise of common stock options		12,650
Total Cash Provided by Financing Activities	5,282,666	24,170,902

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Net increase in cash and cash equivalents	(6,746,552)	6,852,339
Cash and cash equivalents, beginning of period	7,697,531	845,192
Cash and cash equivalents, end of period	\$ 950,979	\$ 7,697,531

Supplemental Schedule of Non-Cash Financing and Investing Activities

Interest paid on long-term debt	\$ 478,665	\$ 173,250
Warrants issued in connection with convertible notes payable	\$	\$ 47,479
Warrants issued in connection with notes payable	\$ 108,000	\$
Warrants issued in connection with the initial public offering	\$	\$ 400,400
Warrants issued in connection with private investment in public entity	\$ 756,001	
Accretion of redeemable convertible preferred stock	\$	\$ 346,374
Abatement of license fee payable to Napo	\$	\$ 250,000
Conversion of convertible preferred stock to common stock	\$	\$ 7,651,288
Conversion of preferred stock warrant liability to common stock warrants	\$	\$ 1,150,985
Conversion of convertible notes to common stock	\$	\$ 2,100,000

The accompanying notes are an integral part of these financial statements.

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements

1. Organization and Business

Jaguar Animal Health, Inc. ("Jaguar" or the "Company") was incorporated on June 6, 2013 (inception) in Delaware. The Company was a majority-owned subsidiary of Napo Pharmaceuticals, Inc. ("Napo" or the "Former Parent") until the close of the Company's initial public offering on May 18, 2015. The Company was formed to develop and commercialize first-in-class gastrointestinal products for companion and production animals and horses. The Company's first commercial product, Neonorm Calf, was launched in 2014 and Neonorm Foal was launched in the first quarter of 2016. In September of 2016, the Company began selling the *Croton lechleri* botanical extract (the "botanical extract") to an exclusive distributor for use in pigs in China. The Company's activities are subject to significant risks and uncertainties, including failing to secure additional funding in order to timely compete the development and commercialization of products. The Company operates in one segment and is headquartered in San Francisco, California.

On June 11, 2013, Jaguar issued 2,666,666 shares of common stock to Napo in exchange for cash and services. On July 1, 2013, Jaguar entered into an employee leasing and overhead agreement (the "Service Agreement") with Napo, under which Napo agreed to provide the Company with the services of certain Napo employees for research and development and the general administrative functions of the Company. On January 27, 2014, Jaguar executed an intellectual property license agreement with Napo pursuant to which Napo transferred fixed assets and development materials, and licensed intellectual property and technology to Jaguar. On February 28, 2014, the Service Agreement terminated and the associated employees became employees of Jaguar effective March 1, 2014. See Note 9 for additional information regarding the capital contributions and Note 4 for the Service Agreement and license agreement details. Effective July 1, 2016, Napo agreed to reimburse the Company for the use of the Company's employee's time and related expenses, including rent and a fixed overhead amount to cover office supplies and copier use.

On October 6, 2016, Jaguar signed a non-binding letter of intent ("LOI") with Napo potentially to merge the two companies.

Reverse Stock Split

In October 2014, the Board of Directors and stockholders approved a 1-for-1.5 reverse stock split (the "Reverse Split") of the Company's outstanding shares of common stock and increased the number of authorized shares of common stock from 10,000,000 shares to 15,000,000 shares. The Company effected the Reverse Split on October 27, 2014. Under the terms of the Reverse Split, each share of common stock, issued and outstanding as of such effective date, was automatically reclassified and changed into two-thirds of one share of common stock, without any action by the stockholder. Fractional shares were rounded down to the nearest whole share. All share and per share amounts have been restated to reflect the Reverse Split.

Initial Public Offering

On May 18, 2015, the Company completed an initial public offering ("IPO") of its common stock. In connection with its IPO, the Company issued and sold 2,860,000 shares of common stock at a price to the public of \$7.00 per share. As a result of the IPO, the Company received \$15.9 million in net proceeds, after deducting underwriting discounts and commissions of \$1.2 million and offering expenses of \$2.9 million (\$3.3 million including non-cash offering expenses) payable by the Company. In connection with the IPO, the Company's outstanding shares of convertible preferred stock were

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

1. Organization and Business (Continued)

automatically converted into 2,010,596 shares of common stock and the Company's outstanding warrants to purchase convertible preferred stock were all converted to warrants to purchase common stock.

Liquidity

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. The Company has incurred recurring operating losses since inception and has an accumulated deficit of \$40,436,108 as of December 31, 2016. The Company expects to incur substantial losses in future periods. Further, the Company's future operations are dependent on the success of the Company's ongoing development and commercialization efforts. There is no assurance that profitable operations, if ever achieved, could be sustained on a continuing basis.

The Company plans to finance its operations and capital funding needs through equity and/or debt financing as well as revenue from future product sales. However, there can be no assurance that additional funding will be available to the Company on acceptable terms on a timely basis, if at all, or that the Company will generate sufficient cash from operations to adequately fund operating needs or ultimately achieve profitability. If the Company is unable to obtain an adequate level of financing needed for the long-term development and commercialization of its products, the Company will need to curtail planned activities and reduce costs. Doing so will likely have an adverse effect on the Company's ability to execute on its business plan. These matters raise substantial doubt about the ability of the Company to continue in existence as a going concern within one year after issuance date of the financial statements. The accompanying financial statements do not include any adjustments that might result from the outcome of these uncertainties.

In June 2016, the Company entered into a common stock purchase agreement with a private investor (the "CSPA"), which provides that, upon the terms and subject to the conditions and limitations set forth therein, the investor is committed to purchase up to an aggregate of \$15.0 million of the Company's common stock over the approximately 30-month term of the agreement. As of December 31, 2016 the Company sold 2,027,490 shares for net cash proceeds of \$2,676,700. Under the CSPA, the Company cannot issue more than the 2,027,490 shares of common stock already issued unless the price per share is \$1.32 (the closing price on the date that the CSPA was signed).

2. Summary of Significant Accounting Policies

Basis of Presentation

The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP").

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires the Company's management to make judgments, assumptions and estimates that affect the amounts reported in its financial statements and the accompanying notes. The accounting policies that reflect the Company's more significant estimates and judgments and that the Company believes are the most critical to aid in fully understanding and evaluating its reported financial results are valuation of stock options; valuation of warrant liabilities; impairment of long lived assets; useful lives for depreciation; valuation

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

adjustments for excess and obsolete inventory; deferred taxes and valuation allowances on deferred tax assets; and evaluation and measurement of contingencies. Those estimates could change, and as a result, actual results could differ materially from those estimates.

Deferred Offering Costs

Deferred offering costs are costs incurred in filings of registration statements with the Securities and Exchange Commission. These deferred offering costs are offset against proceeds received upon the closing of the offerings. Deferred costs of \$143,231 as of December 31, 2015 include legal, accounting and filing fees associated with the follow-on registration offering as more fully described in Note 9. Deferred costs of \$72,710 as of December 31, 2016 include legal, accounting and filing fees associated with the Company's registration of unissued shares in the CSPA.

Concentration of Credit Risk and Cash and Cash Equivalents

Cash is the financial instrument that potentially subjects the Company to a concentration of credit risk as cash is deposited with a bank and cash balances are generally in excess of Federal Deposit Insurance Corporation ("FDIC") insurance limits. The carrying value of cash approximates fair value at December 31, 2016 and 2015.

Fair Values

The Company's financial instruments include, cash and cash equivalents, accounts payable, accrued expenses, amounts due to Napo, the former parent, warrant liabilities, and debt. Cash is reported at fair value. The recorded carrying amount of accounts payable, accrued expenses and amounts due to Napo approximates their fair value due to their short-term nature. The carrying value of the interest-bearing debt approximates fair value based upon the borrowing rates currently available to the Company for bank loans with similar terms and maturities. See Note 3 for the fair value measurements, and Note 7 for the fair value of the Company's warrant liabilities.

Restricted Cash

On August 18, 2015, the Company entered into a long-term loan and security agreement with a lender for up to \$8.0 million, which provided for an initial loan commitment of \$6.0 million. The loan agreement required the Company to maintain a base minimum cash balance of \$4.5 million until the Company met certain milestones and/or when the Company begins making principal payments. On December 22, 2015, the Company achieved certain milestones and the base minimum cash balance was reduced to \$3.0 million. Aggregate principal payments of \$2.5 million further reduced the restricted cash balance to \$511,294 as of December 31, 2016. Restricted cash has been classified within current assets as restrictions will be fully released on April 1, 2017.

Inventories

Inventories are stated at the lower of cost or market. The Company calculates inventory valuation adjustments when conditions indicate that the net realizable value is less than cost due to physical deterioration, usage, obsolescence, reductions in estimated future demand or reduction in selling price. Inventory write-downs are measured as the difference between the cost of inventory and estimated net realizable value. There have been no write-downs to date.

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Property and Equipment

Equipment is stated at cost, less accumulated depreciation. Equipment begins to be depreciated when it is placed into service. Depreciation is calculated using the straight-line method over the estimated useful lives of 3 to 10 years.

Expenditures for repairs and maintenance of assets are charged to expense as incurred. Costs of major additions and betterments are capitalized and depreciated on a straight-line basis over their estimated useful lives. Upon retirement or sale, the cost and related accumulated depreciation of assets disposed of are removed from the accounts and any resulting gain or loss is included in income (loss) from operations.

Long-Lived Assets

The Company regularly reviews the carrying value and estimated lives of all of its long-lived assets, including property and equipment to determine whether indicators of impairment may exist that warrant adjustments to carrying values or estimated useful lives. The determinants used for this evaluation include management's estimate of the asset's ability to generate positive income from operations and positive cash flow in future periods as well as the strategic significance of the assets to the Company's business objectives.

Should an impairment exist, the impairment loss would be measured based on the excess of the carrying amount over the asset's fair value. The Company has not recognized any impairment losses through December 31, 2016.

Research and Development Expense

Research and development expense consists of expenses incurred in performing research and development activities including related salaries, clinical trial and related drug and non-drug product costs, contract services and other outside service expenses. Research and development expense is charged to operating expense in the period incurred.

Revenue Recognition

Sales of Neonorm Calf and Foal to distributors are made under agreements that may provide distributor price adjustments and rights of return under certain circumstances. Until the Company develops sufficient sales history and pipeline visibility, revenue and costs of distributor sales will be deferred until products are sold by the distributor to the distributor's customers. Revenue recognition depends on notification either directly from the distributor that product has been sold to the distributor's customer, when the Company has access to the data. Deferred revenue on shipments to distributors reflect the estimated effects of distributor price adjustments, if any, and the estimated amount of gross margin expected to be realized when the distributor sells through product purchased from the Company. Company sales to distributors are invoiced and included in accounts receivable and deferred revenue upon shipment. Inventory is relieved and revenue recognized upon shipment by the distributor to their customer. The Company had Neonorm revenues of \$141,523 and \$258,381 for the years ended December 31, 2016, and 2015.

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Stock-Based Compensation

The Company's 2013 Equity Incentive Plan and 2014 Stock Incentive Plan (see Note 10) provides for the grant of stock options, restricted stock and restricted stock unit awards.

The Company measures stock awards granted to employees and directors at fair value on the date of grant and recognizes the corresponding compensation expense of the awards, net of estimated forfeitures, over the requisite service periods, which correspond to the vesting periods of the awards. The Company issues stock awards with only service-based vesting conditions, and records compensation expense for these awards using the straight-line method.

The Company uses the grant date fair market value of its common stock to value both employee and non-employee options when granted. The Company revalues non-employee options each reporting period using the fair market value of the Company's common stock as of the last day of each reporting period.

Classification of Securities

The Company applies the principles of ASC 480-10 "Distinguishing Liabilities from Equity" and ASC 815-40 "Derivatives and Hedging Contracts in Entity's Own Equity" to determine whether financial instruments such as warrants, contingently issuable shares and shares subject to repurchase should be classified as liabilities or equity and whether beneficial conversion features exist. Financial instruments such as warrants that are evaluated to be classified as liabilities are fair valued upon issuance and are remeasured at fair value at subsequent reporting periods with the resulting change in fair value recorded in other income/(expense). The fair value of warrants is estimated using the Black Scholes Merton model and requires the input of subjective assumptions including expected stock price volatility and expected life.

Income Taxes

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the financial statements or in the Company's tax returns. Deferred taxes are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent it believes, based upon the weight of available evidence, that it is more likely than not that all or a portion of deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential for recovery of deferred tax assets is evaluated by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

The Company accounts for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate, as well as the related net interest and penalties.

Comprehensive Loss

Comprehensive loss is defined as changes in stockholders' equity (deficit) exclusive of transactions with owners (such as capital contributions and distributions). For the years ended December 31, 2016 and 2015 there was no difference between net loss and comprehensive loss.

Segment Data

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company is an animal health company focused on developing and commercializing prescription and non-prescription products for companion and production animals.

Basic and Diluted Net Loss Per Common Share

Basic net loss per common share is computed by dividing net loss attributable to common stockholders for the period by the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders for the period by the weighted-average number of common shares, including potential dilutive shares of common stock assuming the dilutive effect of potential dilutive securities. For periods in which the Company reports a net loss, diluted net loss per common share is the same as basic net loss per common share, because their impact would be anti-dilutive to the calculation of net loss per common share. Diluted net loss per common share is the same as basic net loss per common share for the years ended December 31, 2016 and 2015.

Recent Accounting Pronouncements

In November 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2016-18, Statement of Cash Flows: Restricted Cash, or ASU 2016-18, that will require entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, entities will no longer present transfers between cash and cash equivalents and restricted cash and restricted cash equivalents in the statement of cash flows. When cash, cash equivalents, restricted cash and restricted cash equivalents are presented in more than one line item on the balance sheet, the new guidance requires a reconciliation of the totals in the statement of cash flows to the related captions in the balance sheet. This reconciliation can be presented either on the face of the statement of cash flows or in the notes to the financial statements. Entities will also have to disclose the nature of their restricted cash and restricted cash equivalent balances. ASU 2016-18 becomes effective for fiscal years beginning after December 15, 2017, and interim periods within those years, with early adoption permitted. Any adjustments must be reflected as of the beginning of the fiscal year that includes that interim period. The adoption of this standard is not expected to have an impact on the Company's financial position or results of operations.

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

In August 2016, the FASB issued Accounting Standards Update, or ASU, No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments, which addresses the following cash flow issues: (1) debt prepayment or debt extinguishment costs; (2) settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; (3) contingent consideration payments made after a business combination; (4) proceeds from the settlement of insurance claims; (5) proceeds from the settlement of corporate-owned life insurance policies, including bank-owned life insurance policies; (6) distributions received from equity method investees; (7) beneficial interests in securitization transactions; and (8) separately identifiable cash flows and application of the predominance principle. The amendments in this ASU are effective for public business entities for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years and are effective for all other entities for fiscal years beginning after December 15, 2018 and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted, including adoption in an interim period. The Company is currently evaluating the impact of the adoption of ASU No. 2016-15 on our consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, which simplifies several aspects of the accounting for employee stock-based payment transactions. The areas for simplification in ASU No. 2016-09 include the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The amendments in this ASU will be effective for annual periods beginning after December 15, 2016 and interim periods within those annual periods. Early adoption is permitted. The Company is currently evaluating the impact of the adoption of ASU No. 2016-09 on our consolidated financial statements.

In March 2016 the FASB issued ASU No. 2016-07, Investments - Equity Method and Joint Ventures (Topic 323): Simplifying the Transition to the Equity Method of Accounting. This new standard eliminates the requirement that when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of influence, an adjustment must be made to the investment, results of operations and retained earnings retroactively on a step-by-step basis as if the equity method had been in effect during all previous periods that the investment has been held. T ASU 2016-07 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. The Company is currently evaluating the potential effects of the adoption of this update on its financial statements.

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-02, Leases (Topic 842), which provides guidance for accounting for leases. Under ASU 2016-02, the Company will be required to recognize the assets and liabilities for the rights and obligations created by leased assets. ASU 2016-02 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company is currently evaluating the impact of the adoption of ASU 2016-02 on our consolidated financial statements.

In November 2015, the FASB issued ASU No. 2015-17, Balance Sheet Classification of Deferred Taxes (Topic 740), which simplifies the presentation of deferred income taxes. Under ASU 2015-17, deferred tax assets and liabilities are required to be classified as noncurrent, eliminating the prior requirement to separate deferred tax assets and liabilities into current and noncurrent. The new guidance is effective for the Company beginning on January 1, 2017, with early adoption permitted.

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

The standard may be adopted prospectively or retrospectively to all periods presented. The Company elected to early adopt the standard on a retrospective basis effective December 31, 2015, and all deferred tax assets and liabilities are classified as non-current on our balance sheet. Adoption had no effect on the Company's balance sheet for 2016 and 2015 as presented.

In April 2015, the FASB issued ASU No. 2015-03, Interest Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, to simplify the presentation of debt issuance costs by requiring debt issuance costs to be presented as a deduction from the corresponding debt liability. ASU 2015-03 will be effective for the Company beginning in its first quarter of 2016, however early adoption is permitted for financial statements that have not been previously issued. The guidance is to be applied retrospectively to all periods presented. The Company adopted ASU 2015-03 on December 31, 2015. The adoption of this guidance did not have an impact on the Company's financial condition, results of operations or cash flows.

In August 2014, the FASB issued ASU No. 2014-15, "Presentation of Financial Statements Going Concern (Subtopic 205-40) Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern", which provides guidance regarding management's responsibility to assess whether substantial doubt exists regarding the ability to continue as a going concern and to provide related footnote disclosures. In connection with preparing financial statements for each annual and interim reporting period, management should evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued (or within one year after the date that the financial statements are available to be issued when applicable). This ASU is effective for the annual period ending after December 15, 2016, and for annual periods and interim periods thereafter. The Company implemented this guidance for the annual period beginning after December 15, 2016. The adoption of this guidance did not have an impact on the Company's financial condition, results of operations or cash flows.

In June 2014, the FASB issued ASU No. 2014-12, "Compensation Stock Compensation (Topic 718)", which requires that a performance target that affects vesting and that could be achieved after the requisite service period be treated as a performance condition. The performance target should not be reflected in estimating the grant-date fair value of the award. Compensation cost should be recognized in the period in which it becomes probable that the performance target will be achieved and should represent the compensation cost attributable to the period(s) for which the requisite service has already been rendered. If the performance target becomes probable of being achieved before the end of the requisite service period, the remaining unrecognized compensation cost should be recognized prospectively over the remaining requisite service period. The total amount of compensation cost recognized during and after the requisite service period should reflect the number of awards that are expected to vest and should be adjusted to reflect those awards that ultimately vest. The requisite service period ends when the employee can cease rendering service and still be eligible to vest in the award if the performance target is achieved. This guidance is effective for annual periods (and interim periods within those annual periods) beginning after December 15, 2015. The Company implemented this guidance for all interim and annual periods beginning after December 15, 2015. The adoption of this guidance did not have an impact on the Company's financial condition, results of operations or cash flows.

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****2. Summary of Significant Accounting Policies (Continued)**

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers." The objective of ASU 2014-19 is to establish a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and will supersede most of the existing revenue recognition guidance, including industry-specific guidance. The core principle of the new standard is that revenue should be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard is effective for annual reporting periods beginning after December 15, 2018 and allows for prospective or retrospective application. The Company currently anticipates utilizing the full retrospective method of adoption allowed by the standard, in order to provide for comparative results in all periods presented, and plans to adopt the standard as of January 1, 2018. The Company is currently evaluating the new guidance, however it does not believe the impact will be significant.

3. Fair Value Measurements

ASC 820 "Fair Value Measurements," defines fair value, establishes a framework for measuring fair value under generally accepted accounting principles and enhances disclosures about fair value measurements. Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs. The standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value which are the following:

Level 1 Quoted prices in active markets for identical assets or liabilities;

Level 2 Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data; and

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

The following table presents information about the Company's warrant liabilities that were measured at fair value on a recurring basis as of December 31, 2016 and 2015 and indicates the fair value hierarchy of the valuation:

	Level 1	Level 2	Level 3	Total
As of December 31, 2016 Warrant Liability	\$	\$	\$ 799,201	\$ 799,201

There were no warrant liabilities at December 31, 2015.

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****3. Fair Value Measurements (Continued)**

The change in the estimated fair value of level 3 liabilities is summarized below:

	Beginning Value of Level 3 Liability	Issuance of Common Stock Warrants	Change in Fair Value of Level 3 Liability	Conversion into Additional Paid-in Capital	Ending Fair Value of Level 3 Liability
For the year ended December 31, 2016	\$	\$ 756,001	\$ 43,200	\$	\$ 799,201
For the year ended December 31, 2015	\$ 601,889	\$ 47,479	\$ 501,617	\$ (1,150,985)	\$

The warrants issued in 2016 were originally valued on November 29, 2016 using the Black-Scholes-Merton model with the following assumptions: stock price of \$0.69, exercise price of \$0.75, term of 5.5 years expiring May 2022, volatility of 71.92%, dividend yield of 0%, and risk-free interest rate of 1.87%. The warrants were revalued at December 31, 2016 using the Black-Scholes model with the following assumptions: stock price of \$0.716, exercise price of \$0.75, term of 5.41 years expiring May 2022, volatility of 73.62%, dividend yield of 0%, and risk-free interest rate of 2.0%.

The change in the fair value of the level 3 warrant liability is reflected in the statement of operations and comprehensive loss for the years ended December 31, 2016 and 2015.

4. Related Party Transactions*Due from former parent*

The Company was a majority-owned subsidiary of Napo until May 18, 2015, the date of the Company's IPO. Additionally, Lisa A. Conte, Chief Executive Officer of the Company, is also the interim Chief Executive Officer of Napo Pharmaceuticals, Inc. The Company has total outstanding receivables (payables) from/to former parent ("Napo") at December 31, 2016 and December 31, 2015 as follows:

	December 31, 2016	December 31, 2015
Due from former parent	\$ 299,819	\$ 6,008
Royalty payable to former parent	(171)	(2,809)
Net receivable from former parent	\$ 299,648	\$ 3,199

	December 31, 2016	December 31, 2015
License fee payable to former parent		(425,000)

Due from former parent

Employee leasing and overhead allocation

Effective July 1, 2016, Napo agreed to reimburse the Company for the use of the Company's employee's time and related expenses, including rent and a fixed overhead amount to cover office supplies and copier use. The total amount of such services was \$627,529 for the six months ended

F-16

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

4. Related Party Transactions (Continued)

December 31, 2016. Napo remitted \$350,000 in fiscal year 2016 and the remaining balance of \$277,529 is included in current assets in the Company's balance sheet.

Other transactions

In 2016, the Company made \$22,290 in payments for consulting, travel and computer equipment on behalf of Napo. In 2015, the Company made \$6,008 in net payments on behalf of Napo, including \$15,000 in Napo legal services paid by the Company, net of \$8,992 of Company consulting services paid by Napo.

The Company purchased from Napo \$37,355 of clinical trial material of which \$897 of unused material remains in prepaid expenses and other current assets on the Company's balance sheet, crofelemer API of \$174,299 all of which was used and expensed in 2016, and \$66,358 of crude plant latex in 2016 none of which has been used in operations and all of which is included in prepaid expenses and other current assets in the Company's balance sheet. All of these purchases were paid in 2016.

The Company sublet office space from Napo from March 1, 2014 through May 31, 2014. The Company paid Napo \$33,897 for rent related to the office space, which was included in general and administrative expense in the Company's statements of operations and comprehensive loss in 2014.

Royalty payable to former parent and license fee payable to former parent and related agreement

On July 11, 2013, Jaguar entered into an option to license Napo's intellectual property and technology (the "Option Agreement"). Under the Option Agreement, upon the payment of \$100,000 in July 2013, the Company obtained an option for a period of two years to execute an exclusive worldwide license to Napo's intellectual property and technology to use for the Company's animal health business. The option price was creditable against future license fees to be paid to Napo under the License Agreement (as defined below).

In January 2014, the Company exercised its option and entered into a license agreement (the "License Agreement") with Napo for an exclusive worldwide license to Napo's intellectual property and technology to permit the Company to develop, formulate, manufacture, market, use, offer for sale, sell, import, export, commercialize and distribute products for veterinary treatment uses and indications for all species of animals. The Company was originally obligated to pay a one-time non-refundable license fee of \$2,000,000, less the option fee of \$100,000. At the Company's option, the license fee could have been paid in common stock. In January 2015, the License Agreement was amended to decrease the one-time non-refundable license fee payable from \$2,000,000 to \$1,750,000 in exchange for acceleration of the payment of the fee. Given that Napo is a significant shareholder of the Company, the abatement of the license fee amount has been recorded as a capital contribution in the accompanying condensed financial statements. In the years ending December 31, 2016 and 2015, the Company made payments of \$425,000 and \$1.2 million, respectively.

Milestone payments aggregating \$3,150,000 may also be due to Napo based on regulatory approvals of various veterinary products. In addition to the milestone payments, the Company will owe Napo an 8% royalty on annual net sales of products derived from the *Croton lechleri* tree, up to \$30,000,000 and then, a royalty of 10% on annual net sales of \$30,000,000 or more. Additionally, if any other products are developed, the Company will owe Napo a 2% royalty on annual net sales of

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****4. Related Party Transactions (Continued)**

pharmaceutical prescription products that are not derived from *Croton lechleri* and a 1% royalty on annual net sales of non-prescription products that are not derived from *Croton lechleri*. The royalty term expires at the longer of 10 years from the first sale of each individual product or when there is no longer a valid patent claim covering any of the products and a competitive product has entered the market. However, because an IPO of at least \$10,000,000 was consummated prior to December 31, 2015, the royalty was reduced to 2% of annual net sales of its prescription products derived from *Croton lechleri* and 1% of net sales of its non-prescription products derived from *Croton lechleri* and no milestone payment will be due and no royalties will be owed on any additional products developed. The Company incurred \$1,015 and \$39,734 in royalties for the years ended December 31, 2016 and 2015, respectively, which are included in sales and marketing expense in the Company's statement of operations and comprehensive loss. The Company had unpaid royalties of \$171 and \$2,810 at December 31, 2016 and 2015, respectively, which are netted with other receivables due from the former parent and are included in current assets in the Company's balance sheet. The Company may, at its sole discretion, elect to remit any milestone payments and/or royalties in the form of the Company's common stock.

In addition to receiving a License Agreement to Napo's intellectual property and technology, the License also transferred to the Company certain materials and equipment. Raw materials of \$1.2 million transferred from Napo were included in research and development expense on the statements of operations and comprehensive loss during the year ended December 31, 2014. Equipment of \$811,087 related to the License is included in property and equipment on the Company's balance sheet at December 31, 2016 and 2015 at the cost paid by Napo, which approximates fair value.

The Company has agreed under the License Agreement to defend, indemnify and hold Napo, its affiliates, and the officers, directors, employees, consultants and contractors of Napo harmless from and against any losses, costs, damages, liabilities, fees and expenses arising out of any third-party claim related to the Company's gross negligence, breach of covenants or the manufacture, sale or use of the product or products.

5. Balance Sheet Components***Property and Equipment***

Property and equipment at December 31, 2016 and 2015 consisted of the following:

	December 31, 2016	December 31, 2015
Lab equipment	\$ 811,087	\$ 811,087
Clinical equipment	64,870	23,300
Software	62,637	
Total property and equipment at cost	938,594	834,387
Accumulated Depreciation	(52,649)	(5,155)
Property and Equipment, net	\$ 885,945	\$ 829,232

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****5. Balance Sheet Components (Continued)**

Depreciation and amortization expense was \$47,494 and \$5,155 in the years ended December 31, 2016 and 2015 and was recorded in the statements of operations and comprehensive loss as follows:

	Years Ended December 31,	
	2016	2015
Depreciation Lab Equipment research and development expense	\$ 26,271	\$ 4,378
Depreciation Clinical Equipment research and development expense	10,203	777
Depreciation Software general and administrative expense	11,020	
Total Depreciation Expense	\$ 47,494	\$ 5,155

Accrued Expenses

Accrued expenses at December 31, 2016 and 2015 consist of the following:

	December 31, 2016	December 31, 2015
Accrued compensation and related:		
Accrued vacation	\$ 223,769	187,734
Accrued payroll	2,692	80,692
Accrued payroll tax	20,140	43,702
	246,601	312,128
Accrued interest	123,982	127,149
Accrued contract manufacturing costs		110,141
Accrued clinical	36,725	166,750
Accrued other	175,214	82,266
Total	\$ 582,522	798,434

6. Commitments and Contingencies**Operating Leases**

Effective July 1, 2015, the Company leases its San Francisco, California headquarters under a non-cancelable sub-lease agreement that expires August 31, 2018. The Company provided cash deposits of \$122,163, consisting of a security deposit of \$29,539 and prepayment of the last three months of the lease of \$92,623, which are included in other assets on the Company's balance sheet.

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****6. Commitments and Contingencies (Continued)**

Future minimum lease payments under non-cancelable operating leases as of December 31, 2016 are as follows:

Years ending December 31,	Amount
2017	363,486
2018	245,327
Total minimum lease payments	608,813

The Company recognizes rent expense on a straight-line basis over the non-cancelable lease period. Rent expense under the non-cancelable operating lease was \$361,114 for the year ended December 31, 2016 and \$180,557 for the six months ended December 31, 2015. Rent expense is included in general and administrative expense in the Company's statements of operations and comprehensive loss.

As discussed in Note 4 above, on March 1, 2014, the Company sublet office space in San Francisco, California from Napo. The Company paid Napo \$33,897 for rent related to the office space for the months of March, April and May of 2014, which was included in general and administrative expense in the Company's statements of operations and comprehensive loss. Beginning June 1, 2014, the Company assumed Napo's sublease from the landlord. The term of the assumed sublease was from June 1, 2014 through June 30, 2015. Rent expense under the sublease was \$69,580 and \$80,816 for the years ended December 31, 2015 and 2014, respectively, which was included in general and administrative expense in the Company's statement of operations and comprehensive loss.

Contract Manufacturing Commitment

Effective June 26, 2014 the Company entered into a technology transfer and commercial manufacturing agreement (the "Transfer Agreement") with a contract manufacturer in Italy (the "Manufacturer"), whereby the Company and the Manufacturer will cooperate to develop and refine the manufacturing process for the Company's prescription and non-prescription products. Pursuant to the Transfer Agreement, the Company was to make prepayments to the Manufacturer as follows: (1) a start-up fee of €500,000, €250,000 of which was to be paid at the earlier to occur of September 15, 2014 or the closing date of an initial public offering and €250,000 of which was to be paid at the time of installation and qualification of the Company's equipment at their facility, (2) related to the technology transfer, €620,000, €310,000 of which was paid subsequent to the signature of the Transfer Agreement and €310,000 of which was to be paid after the delivery of a final study report, (3) for design of a portion of the Manufacturer's facility, €100,000 was to be paid within five days of the signature of the Transfer Agreement, and (4) a €300,000 bonus fee payable in two equal installments, the first of which is due by the end of March 2015, with the remainder paid by the end of December 2015. The first €150,000 of the bonus fee payable was paid in May 2015. Additionally, the Transfer Agreement stipulated that the Company was to pay the Manufacturer an aggregate of €500,000 upon the delivery of agreed-upon levels of satisfactory product. Further, the Company issued the Manufacturer warrants to purchase 16,666 shares of common stock with an exercise price of 90% of the initial public offering price, amended to \$6.30 in March 2015.

Effective February 12, 2015, March 25, 2015 and July 15, 2015 the Company entered into amendments delaying payments to the Manufacturer as follows: (i) the €500,000 start-up fee was due

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

6. Commitments and Contingencies (Continued)

by the end of April 2015 and has been paid during the year ended December 31, 2015, (ii) related to the technology transfer, of the remaining €310,000, €215,000 was due April 2015 and €95,000 was due June 30, 2015, both of which were paid during the year ended December 31, 2015, (iii) related to the design of a portion of the Manufacturer's facility, the payment has increased to €170,000, €150,000 of which was due at the end of April 2015 and €20,000 was due on June 30, 2015, both of which have been paid during the year ended December 31, 2015 (iv) the fees linked to the deliverables are now due €250,000 on December 31, 2015 and €250,000 on March 31, 2016, 2015, (v) the bonus fee payable of €300,000, €150,000 was due at the end of April 2015 and has been paid during the year ended December 31, 2015 and €150,000 due at December 31, 2015. In May 2015, the Company entered into a Memorandum of Understanding ("MOU") with the contract manufacturer and paid the start-up fee of €500,000 and the technology transfer fee of €215,000. In accordance with the terms of the Memorandum of Understanding, the Manufacturer will supply 400Kg of the Company's API at no cost in anticipation of the future deduction by December 2015. The final €250,000 was paid on March 29, 2016.

In December 2015, we entered into an amendment to our technology transfer and commercial manufacturing agreement with our contract manufacturer in Italy delaying a €150,000 bonus fee payment which was originally due on December 31, 2015 to March 31, 2016. On April 4, 2016, the Company further amended the payment date to June 30, 2016. The Company paid the final €150,000 bonus fee on July 15, 2016.

The Company expensed the total cost of the contract ratably over the estimated life of the contract, or the total amount paid if greater. As of December 31, 2016 and December 31, 2015, the amortized costs exceeded amounts paid by \$0 and \$110,141, respectively, which are included in accrued manufacturing costs in accrued liabilities in the Company's balance sheet.

Debt Obligations

See Note 7 Debt and Warrants.

Contingencies

From time to time, the Company may be involved in legal proceedings arising in the ordinary course of business. The Company believes there is no litigation pending that could have, individually or in the aggregate, a material adverse effect on the financial position, results of operations or cash flows.

7. Debt and Warrants

Convertible Notes and Warrants

2013 Convertible Notes

From July through September 2013, the Company issued four convertible promissory notes (collectively the "Notes") for gross aggregate proceeds of \$525,000 to various third-party lenders. The Notes bore interest at 8% per annum. The Notes automatically matured and the entire outstanding principal amount, together with accrued interest, was due and payable in cash at the earlier of July 8, 2015 (the "Maturity Date") or ten business days after the date of consummation of the initial closing of a first equity round of financing. The Company consummated a first equity round of financing prior to the Maturity Date with a pre-money valuation of greater than \$3.0 million, and, accordingly, principal

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

7. Debt and Warrants (Continued)

and accrued interest was converted into shares of common stock at 75% of the purchase price paid by such equity investors. These notes were all converted to common stock in February 2014 upon the issuance of the convertible preferred stock. In February 2014, in connection with the first equity round of financing and issuance of the Series A convertible preferred stock, the noteholders exercised their option to convert their Notes into 207,664 shares of common stock and accrued interest was paid in cash to the noteholders. The accreted interest expense related to the discount on the Notes was \$1,443 for the period from January 1, 2014 to the conversion date of the Notes. Upon conversion, the entire remaining debt discount of \$4,071 was recorded as interest expense.

In connection with the Notes, the Company issued warrants to the noteholders, which became exercisable to purchase an aggregate of 207,664 shares of common stock as of the issuance of the first equity round of financing (the "Warrants"). The Warrants have a \$2.53 exercise price, are fully exercisable from the initial date of the first equity round of financing, and have a five-year term subsequent to that date.

2014 Convertible Notes

On June 2, 2014, pursuant to a convertible note purchase agreement, the Company issued convertible promissory notes in the aggregate principal amount of \$300,000 to two accredited investors, including a convertible promissory note for \$200,000 to a board member to which Series A preferred stock was sold. These notes accrued interest at 3% per annum and automatically were to mature on June 1, 2015. Interest expense for the year ended December 31, 2015 was \$3,237 and is included in interest expense in the statement of operations and comprehensive loss. Accrued interest is \$8,507 and is included in accrued liabilities in the balance sheet. All interest was to be paid in cash upon maturity. Upon the closing of the IPO, the outstanding principal amount automatically converted into 53,571 shares common stock at \$5.60, as amended in March 2015. Upon issuance, the Company analyzed the beneficial nature of the conversion terms and determined that a beneficial conversion feature ("BCF") existed because the effective conversion price on issuance of the notes was less than the fair value at the time of the issuance. The Company calculated the value of the BCF using the intrinsic method and recorded a BCF of \$75,000 as a discount to notes payable and to additional paid-in capital. For the year ended December 31, 2015, the Company amortized \$31,250 of the discount as interest expense in the statements of operations and comprehensive loss.

On July 16, 2014, pursuant to a convertible note purchase agreement, the Company issued a convertible promissory note in the principal amount of \$150,000 to an accredited investor. This note accrued interest at 3% per annum and automatically was to mature on June 1, 2015. Interest expense for the year ended December 31, 2015 was \$1,627 and is included in interest expense in the statements of operations and comprehensive loss. Accrued interest is \$3,711 and is included in accrued liabilities in the balance sheet. All interest was to be paid in cash upon maturity. Upon the closing of the IPO, the outstanding principal amount automatically converted into 26,785 shares of common stock at \$5.60, as amended in March 2015. Upon issuance, the Company analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. The Company calculated the value of the BCF using the intrinsic method and recorded a BCF of \$37,500 as a discount to the notes payable and to additional paid-in capital. For the year ended December 31, 2015, the Company amortized \$17,857 of the discount as interest expense in the statements of operations and comprehensive loss.

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****7. Debt and Warrants (Continued)**

In connection with the Transfer Agreement (Note 6) the Company issued fully vested and immediately exercisable warrants to the Manufacturer to purchase 16,666 shares of common stock at 90% of the IPO price, amended to \$6.30 in March 2015, for a period of five years. The fair value of the warrants, \$37,840, was recorded as research and development expense and additional paid-in capital in June 2014. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$4.83, exercise price of \$4.35, term of five years, volatility of 49%, dividend yield of 0%, and risk-free interest rate of 1.64%.

On December 23, 2014, pursuant to a convertible note purchase agreement, the Company issued convertible promissory notes in the aggregate principal amount of \$650,000 to three accredited investors, including a convertible promissory note for \$250,000 to the same board member to which the June 2, 2014 \$200,000 convertible promissory note was issued and to which Series A preferred stock was sold. These notes accrued interest at 12% per annum and became payable within thirty days following the IPO. Interest expense for the year ended December 31, 2015 was \$28,210 and is included in interest expense in the statements of operations and comprehensive loss. Accrued interest is \$30,132 and is included in accrued liabilities in the balance sheet. All interest was to be paid in cash upon maturity. Upon consummation of the Company's IPO, the noteholders converted the notes into 116,070 shares of common stock at a conversion price equal to 80% of the IPO price, amended to \$5.60 in March 2015. In connection with these notes, the Company also issued the lenders a fully vested warrant to purchase shares of the Company's common stock at an exercise price equal to 80% of the IPO price, amended to \$5.60 in March 2015. These warrants entitle the noteholders to purchase 58,035 shares of common stock. The fair value of the warrants, \$147,943, was recorded as a debt discount and liability at December 23, 2014. The Company amortized \$141,890 of this discount in the year ended December 31, 2015 which has been recorded as interest expense in the Company's statements of operations and comprehensive loss. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$4.59, exercise price of \$4.15, term of three years expiring December 2017, volatility of 49%, dividend yield of 0%, and risk-free interest rate of 1.10%. Based on the circumstances, the value derived using the Black-Scholes model approximated that which would be obtained using a lattice model. The debt discount was amortized as interest expense over the one hundred ninety days from issuance of the notes through their first maturity date of July 31, 2015, beginning in January 2015. The Company analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. The Company calculated the value of the BCF using the intrinsic method. A BCF of \$502,057 was recorded as a discount to the notes payable and to additional paid-in capital. For the year ended December 31, 2015, the Company amortized \$484,329 of the BCF as interest expense in the statements of operations and comprehensive loss.

2015 Convertible Notes

In February 2015, the Company issued convertible promissory notes to two accredited investors in the aggregate principal amount of \$250,000. These notes were issued pursuant to the convertible note purchase agreement dated December 23, 2014. In connection with the issuance of the notes, the Company issued the lenders warrants to purchase 22,320 shares at \$5.60 per share, which expire December 31, 2017. Principal and interest of \$103,912 was paid in May 2015 for \$100,000 of these notes. The Company analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****7. Debt and Warrants (Continued)**

issuance. The Company calculated the value of the BCF using the intrinsic method. A BCF of for the full face value was recorded as a discount to the notes payable and to additional paid-in capital. For the years ended December 31, 2016 and 2015, the Company amortized \$0 and \$250,000 of the BCF as interest expense in the Company's statement of operations and comprehensive income.

Extinguishment of debt

The remaining outstanding note of \$150,000 is payable to the investor at an effective simple interest rate of 12% per annum, and was due in full on July 31, 2016. On July 28, 2016, the Company entered into an amendment to delay the repayment of the principal and related interest under the terms of the remaining note from July 31, 2016 to October 31, 2016. On November 8, 2016, the Company entered into an amendment to extend the maturity date of the remaining note from October 31, 2016 to January 1, 2017. In exchange for the extension of the maturity date, on November 8, 2016, the Company's board of directors granted the lender a warrant to purchase 120,000 shares of the Company's common stock for \$0.01 per share. The warrant is exercisable at any time on or before July 28, 2022, the expiration date of the warrant.

The amendment and related warrant issuance resulted in the Company treating the debt as having been extinguished and replaced with new debt for accounting purposes due to meeting the 10% cash flow test. The Company calculated a loss on the extinguishment of debt of \$108,000, or the equivalent to the fair value of the warrants granted, which is included in other expense in the Company's statements of operations and comprehensive loss.

The \$150,000 note is included in notes payable in the Company's balance sheet. The Company has accrued interest of \$33,929 and \$15,880, which is included in accrued liabilities in the Company's balance sheet as of December 31, 2016 and 2015, respectively, and incurred \$18,049 and \$15,880 in interest expense in the years ended December 31, 2016 and 2015, respectively.

On December 28, 2016, the Company entered into an amendment to extend the maturity date of the note from January 1, 2017 to January 31, 2017. On January 31, 2017, the Company entered into an amendment to further extend the due date of the \$150,000 convertible note payable from January 31, 2017 to January 1, 2018.

In March 2015, the Company entered into a non-binding letter of intent with an investor. In connection therewith, the investor paid the Company \$1.0 million. At March 31, 2015, the Company had recorded this amount as a loan advance on the balance sheet. In April 2015, the investor purchased \$1.0 million of convertible promissory notes from the Company, the terms of which provided that such notes were to be converted into shares of the Company's common stock upon the closing of an IPO at a conversion price of \$5.60 per share. In connection with the purchase of the notes, the Company issued the investor a warrant to purchase 89,285 shares at \$5.60 per share, which expires December 31, 2017. The notes accrued simple interest of 12% per annum and, upon consummation of the Company's IPO in May 2015, converted into 178,571 shares of the Company's common stock. The Company analyzed the beneficial nature of the conversion terms and determined that a BCF existed because the effective conversion price was less than the fair value at the time of the issuance. The Company calculated the value of the BCF using the intrinsic method. A BCF of for the full face value was recorded as a discount to the notes payable and to additional paid-in capital. For the year ended December 31, 2015, the Company amortized \$1,000,000 of the BCF as interest expense in the Company's statements of operations and comprehensive income. The Company has accrued interest of

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****7. Debt and Warrants (Continued)**

\$17,753, which is included in accrued liabilities in the Company's balance sheet, and has incurred \$17,753 and \$15,880 in interest expense in the years ended December 31, 2016 and 2015, respectively.

The outstanding convertible notes payable obligation was \$150,000 as of December 31, 2016 and 2015.

Interest expense on the convertible notes for the years ended December 31, 2016 and 2015 was as follows:

	Years Ended December 31,	
	2016	2015
Nominal Interest	\$ 18,049	\$ 70,619
Amortization of debt discount		1,925,326
	\$ 18,049	\$ 1,995,945

Interest payable on the convertible notes at December 31, 2016 and 2015 was as follows:

	December 31, 2016	December 31, 2015
Interest Payable:	\$ 94,048	\$ 75,999

Notes Payable Bridge Loans

On October 30, 2014, the Company entered into a standby bridge financing agreement with two lenders, which was amended and restated on December 3, 2014, which provided a loan commitment in the aggregate principal amount of \$1.0 million (the "Bridge"). Proceeds to the Company were net of a \$100,000 debt discount under the terms of the Bridge and net of \$104,000 of debt issuance costs. This debt discount and debt issuance costs were recorded as interest expense using the effective interest method, over the six month term of the Bridge. The Bridge became payable upon the IPO. The Bridge was repaid in May 2015, including interest thereon in an amount of \$1,321,600. In connection with the Bridge, the lenders were granted warrants to purchase 178,569 shares of the Company's common stock determined by dividing \$1.0 million by the exercise price of 80% of the IPO price, amended to \$5.60 in March 2015. The fair value of the warrants, \$505,348, was originally recorded as a debt discount and liability at December 3, 2014. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$5.01, exercise price of \$5.23, term of five years expiring December 2019, volatility of 63%, dividend yield of 0%, and risk-free interest rate of 1.61%. Based on the circumstances, the value derived using the Black-Scholes model approximated that which would be obtained using a lattice model. The debt discount was recorded as interest expense over the six month term of the Bridge. Of the aggregate debt discount of \$605,348 (warrants and original \$100,000 discount), \$521,291 was recorded as interest expense during the year ended December 31, 2015. Additional financing costs of \$104,000 were incurred related to the Bridge and deferred on closing. These were recognized as interest expense over the six-month term of the Bridge using the effective interest method. The Company amortized the remaining \$86,667 of these deferred financing charges by the end of May 2015 was recorded the amortized amounts as interest expense. The Company fully extinguished the debt and accrued interest in May 2015.

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****7. Debt and Warrants (Continued)**

Interest expense on the notes payable-bridge loans for the years ended December 31, 2016 and 2015 was as follows:

	Years Ended December 31,	
	2016	2015
Nominal Interest	\$	\$ 100,000
Amortization of debt discount		521,291
Repayment premium		201,600
Debt issuance costs		86,667
	\$	\$ 909,558

Standby Line of Credit

In August 2014, the Company entered into a standby line of credit with an accredited investor for up to \$1.0 million pursuant to a Line of Credit and Loan Agreement dated August 26, 2014. In connection with the entry into the standby line of credit, the Company issued the lender a fully vested warrant to purchase 33,333 shares of common stock at an exercise price equal to 80% of the IPO price, amended to \$5.60 in March 2015, which expires in August 2016. The fair value of the warrants, \$114,300, was recorded as interest expense and additional paid-in capital in August 2014. The warrants were originally valued using the Black-Scholes model with the following assumptions: stock price of \$8.00, exercise price of \$6.40, term of two years, volatility of 52%, dividend yield of 0%, and risk-free interest rate of 0.52%. The line of credit expired on March 31, 2015 and there were no drawdowns under the facility. The warrants expired in August 2016.

Long-term Debt

In August 2015, the Company entered into a loan and security agreement with a lender for up to \$8.0 million, which provided for an initial loan commitment of \$6.0 million. The loan agreement requires the Company to maintain \$4.5 million of the proceeds in cash, which may be reduced or eliminated on the achievement of certain milestones. An additional \$2.0 million is available contingent on the achievement of certain further milestones. The agreement has a term of three years, with interest only payments through February 29, 2016. Thereafter, principal and interest payments will be made with an interest rate of 9.9%. Additionally, there will be a balloon payment of \$560,000 on August 1, 2018. This amount is being recognized over the term of the loan agreement and the effective interest rate, considering the balloon payment, is 15.0%. Proceeds to the Company were net of a \$134,433 debt discount under the terms of the loan agreement. This debt discount is being recorded as interest expense, using the interest method, over the term of the loan agreement. Under the agreement, the Company is entitled to prepay principal and accrued interest upon five days prior notice to the lender. In the event of prepayment, the Company is obligated to pay a prepayment charge. If such prepayment is made during any of the first twelve months of the loan agreement, the prepayment charge will be (a) during such time as the Company is required to maintain a minimum cash balance, 2% of the minimum cash balance amount plus 3% of the difference between the amount being prepaid and the minimum cash balance, and (b) after such time as the Company is no longer required to

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****7. Debt and Warrants (Continued)**

maintain a minimum cash balance, 3% of the amount being prepaid. If such prepayment is made during any time after the first twelve months of the loan agreement, 1% of the amount being prepaid.

On April 21, 2016, the loan and security was amended upon which the Company repaid \$1.5 million of the debt out of restricted cash. The amendment modified the repayment amortization schedule providing a four-month period of interest only payments for the period from May through August 2016.

As of December 31, 2016 and 2015, the net long-term debt obligation was as follows:

	December 31, 2016	December 31, 2015
Debt and unpaid accrued end-of-term payment	\$ 3,894,320	\$ 6,115,797
Unamortized note discount	(42,493)	(106,635)
Unamortized debt issuance costs	(114,626)	(206,235)
 Net debt obligation	 \$ 3,737,201	 \$ 5,802,927
 Current portion of long-term debt	 \$ 1,919,675	 \$ 1,707,899
Long-term debt, net of discount	1,817,526	\$ 4,095,028
 Total	 \$ 3,737,201	 \$ 5,802,927

Future principal payments under the long-term debt are as follows:

Years ending December 31	Amount
2017	\$ 2,032,048
2018	1,479,246
 Total future principal payments	 3,511,294
2018 end-of-term payment	560,000
	4,071,294
Less: unaccrued end-of-term payment at December 31, 2016	(176,974)
 Debt and unpaid accrued end-of-term payment	 \$ 3,894,320

The obligation at December 31, 2015 includes an end-of-term payment of \$560,000, which accretes over the life of the loan as interest expense. As a result of the debt discount and the end-of-term payment, the effective interest rate for the loan differs from the contractual rate.

Interest expense on the long-term debt for the years ended December 31, 2016 and 2015 was as follows:

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

	December 31, 2016	December 31, 2015
Nominal Interest	\$ 457,448	\$ 224,400
Amortization of debt discount	64,142	27,798
Accretion of end-of-term payment	267,230	115,797
Debt issuance costs	178,713	43,789
	\$ 967,533	\$ 411,784

F-27

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

7. Debt and Warrants (Continued)

At the IPO, the Company's outstanding warrants to purchase convertible preferred stock were all converted to warrants to purchase common stock.

Warrants

On November 22, 2016, the Company entered into a Securities Purchase Agreement, or the 2016 Purchase Agreement, with certain institutional investors, pursuant to which the Company sold securities to such investors in a private placement transaction, which we refer to herein as the 2016 Private Placement. In the 2016 Private Placement, the Company sold an aggregate of 1,666,668 shares of the Company's common stock at a price of \$0.60 per share for gross proceeds of approximately \$1.0 million. The investors in the 2016 Private Placement also received (i) warrants to purchase up to an aggregate of 1,666,668 shares of the Company's common stock, at an exercise price of \$0.75 per share, or the Series A Warrants, and the Placement Agent received warrants to purchase 133,333 shares of our common stock in lieu of cash for service fees with the same terms as the investors; (ii) warrants to purchase up to an aggregate 1,666,668 shares of the Company's common stock, at an exercise price of \$0.90 per share, or the Series B Warrants, and (iii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$1.00 per share, or the Series C Warrants and, together with the Series A Warrants and the Series B Warrants, the 2016 Warrants. The warrants were granted in three series with different terms. The warrants were valued using the Black-Scholes-Merton warrant pricing model as follows:

Series A Warrants and Placement Agent Warrants: 1,666,668 warrant shares with a strike price of \$0.75 per share and an expiration date of May 29, 2022; and 133,333 warrant shares to the placement agent with a strike price of \$0.75 and an expiration date of May 29, 2022; the expected life is 5.5 years, the volatility is 71.92% and the risk free rate is 1.87% in valuing these warrants.

Series B Warrants: 1,666,668 warrant shares with a strike price of \$0.90 per share and an expiration date of November 29, 2017; the expected life is one year, the volatility is 116.65% and the risk free rate is 0.78% in valuing these warrants.

Series C Warrants: 1,666,668 warrant shares with a strike price of \$1.00 per share and an expiration date of May 29, 2018; the expected life is 1.5 years, the volatility is 116.92% and the risk free rate is 0.94%.

The warrant valuation date was November 29, 2016 and the closing price of \$0.69 per share was used in determining the fair value of the warrants. The series A warrants and placement agent warrants were valued at \$756,001 and were classified as a warrant liability in the Company's balance sheet. The series A warrants and placement agent warrants were revalued on December 31, 2016 at \$799,201 which is included in the Company's balance sheet, and the \$43,200 increase is included in the Company's statements of operations and comprehensive loss. The strike price was \$0.75 per share, the expected life was 5.41 years, the volatility was 73.62% and the risk free rate was 2.0%. The series B and C warrants were classified as equity, and as such were not subject to revaluation at year end. Costs incurred in connection with the issuance were allocated based on the relative fair values of the Series A and the Series B and C warrants.

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****7. Debt and Warrants (Continued)**

The Company's warrant activity is summarized as follows:

	December 31, 2016	December 31, 2015
Beginning balance at January 1	748,872	494,267
Warrants granted	5,253,337	254,605
Warrants cancelled	(33,333)	
Ending balance at December 31	5,968,876	748,872

8. Redeemable Convertible Preferred Stock

In February, April and May of 2014, the Company issued 3,015,902 shares of convertible preferred stock in exchange for \$6,777,338. The redemption value of the convertible preferred stock was \$9.0 million. The differences between the respective redemption values/liquidation preference and carrying values are being accreted over the period from the date of issuance to the earliest possible redemption date, February 2017. The Company has recorded accretion of \$263,060 for the year ended December 31, 2015.

Costs incurred in connection with the issuance of Series A redeemable convertible preferred stock during the year ended December 31, 2014 were \$119,097 which have been recorded as a reduction to the carrying amounts of convertible preferred stock and are being accreted to the carrying value of the applicable preferred stock to the redemption date. The Company has recorded accretion of \$83,334 for the year ended December 31, 2015.

On May 18, 2015, the Company completed its IPO. In connection with the IPO, all of the Company's 3,015,902 outstanding shares of convertible preferred stock were automatically converted into 2,010,596 shares of common stock. Prior to this conversion event, Convertible Preferred Stock had been classified outside of stockholders' (deficit) in accordance with authoritative guidance for the classification and measurement of potentially redeemable securities.

9. Stockholders' Equity**Common Stock**

The Company's second amended and restated certificate of incorporation authorizes the Company to issue 50,000,000 shares of common stock \$0.0001 par value. The holders of common stock are entitled to one vote for each share of common stock held at all meetings of stockholders. The number of authorized shares of common stock may be increased or decreased by the affirmative vote of the holders of shares of capital stock of the Company representing a majority of the votes represented by all shares (including Preferred Stock) entitled to vote.

In February 2016, the Company completed a secondary public offering of its common stock. In connection with its secondary public offering, the Company issued and sold 2,000,000 shares of common stock at a price to the public of \$2.50 per share. As a result of the secondary public offering, the Company received \$4.1 million in net proceeds, after deducting underwriting discounts and commissions of \$373,011 and offering expenses of \$496,887.

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****9. Stockholders' Equity (Continued)**

In June 2016, the Company entered into a common stock purchase agreement with a private investor (the "CSPA"), which provides that, upon the terms and subject to the conditions and limitations set forth therein, the investor is committed to purchase up to an aggregate of \$15.0 million of the Company's common stock over the approximately 30-month term of the agreement. Upon execution of the CSPA, the Company sold 222,222 shares of its common stock to the investor at \$2.25 per share for net proceeds of \$394,534, reflecting gross proceeds of \$500,000 and offering expenses of \$105,398. In consideration for entering into the CSPA, the Company issued 456,667 shares of its common stock to the investor. Concurrently with entering into the CSPA, the Company also entered into a registration rights agreement with the investor (the "Registration Agreement"), in which the Company agreed to file one or more registration statements, as permissible and necessary to register under the Securities Act of 1933, as amended, the sale of the shares of the Company's common stock that have been and may be issued to the investor under the CSPA. On June 22, 2016 and September 22, 2016, the Company filed registration statements on Form S-1 (File Nos. 333-212173 and 333-213751) pursuant to the terms of the Registration Agreement, which registration statements were declared effective on July 8, 2016 and October 5, 2016, respectively. In the year ended December 31, 2016, pursuant to the CSPA, the Company sold an additional 1,348,601 shares of the Company's common stock in exchange for \$2,176,700 of cash proceeds. Of the \$15.0 million available under the CSPA, the Company has received \$2,676,700 as of December 31, 2016. Under the CSPA, the Company cannot issue more than the 2,027,490 shares of common stock already issued unless the price per share is \$1.32 (the closing price on the date that the CSPA was signed).

In October 2016, the Company entered into a Common Stock Purchase Agreement with an existing private investor. Upon execution of the agreement the Company sold 170,455 shares of its common stock in exchange for \$150,000 in cash proceeds.

On November 22, 2016, the Company entered into a Securities Purchase Agreement, or the 2016 Purchase Agreement, with certain institutional investors, pursuant to which the Company sold securities to such investors in a private placement transaction, which is referred to herein as the 2016 Private Placement. In the 2016 Private Placement, the Company sold an aggregate of 1,666,668 shares of its common stock at a price of \$0.60 per share for net proceeds of \$677,224 or gross proceeds of approximately \$1.0 million less \$322,777 in issuance costs. The investors in the 2016 Private Placement also received (i) warrants to purchase up to an aggregate of 1,666,668 shares of our common stock, at an exercise price of \$0.75 per share, or the Series A Warrants, (ii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$0.90 per share, or the Series B Warrants, and (iii) warrants to purchase up to an aggregate 1,666,668 shares of our common stock, at an exercise price of \$1.00 per share, or the Series C Warrants and, together with the Series A Warrants and the Series B Warrants, the 2016 Warrants. The issuance costs were allocated to common stock, series A warrants, and Series B and C warrants based on the relative fair value of each:

Instruments	Fair Value	% Allocation	Issuance Costs (allocated)
Common Stock	\$ 156,522	16%	\$ 50,522
Warrants (Series A)	700,001	70%	225,944
Warrants (Series B and C)	143,478	14%	46,311
Total	\$ 1,000,001	100%	\$ 322,777

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****9. Stockholders' Equity (Continued)**

Common stock of a net \$106,000 (fair value less issuance costs) was included in equity in the company's balance sheet. Series A warrants of \$756,001, consisting of the series A warrants of \$700,001 and the series A placement agent warrants of \$56,000, are included in current liabilities in the company's balance sheet and the \$225,944 of issuance cost was expensed and is in general and administrative expense on the company's statement of operations and comprehensive loss. Series B and C warrants of a net \$97,167 (fair value less issuance costs) were classified in equity in the company's balance sheet.

In exchange for the extension of the maturity date of the outstanding 2015 Convertible Note, on, November 8, 2016, the Company's board of directors granted the lender a warrant to purchase 120,000 shares of the Company's common stock for \$0.01 per share. The warrant is exercisable at any time on or before July 28, 2022, the expiration date of the warrant. The amendment and related warrant issuance resulted in the Company treating the debt as having been extinguished and replaced with new debt for accounting purposes due to meeting the 10% cash flow test. The Company calculated a loss on the extinguishment of debt of \$108,000, or the equivalent to the fair value of the warrants granted, which is included in other expense in the Company's statements of operations and comprehensive loss. The warrants were valued on November 8, 2016 using the Black-Scholes-Merton model with the following assumptions: stock price of \$0.91, exercise price of \$0.01, term of 5.72 years expiring July 2022, volatility of 70.35%, dividend yield of 0%, and risk-free interest rate of 1.45%.

As of December 31, 2016 and 2015, the Company had reserved shares of common stock for issuance as follows:

	December 31, 2016	December 31, 2015
Options issued and outstanding	2,571,220	919,506
Options available for grant	39,988	106,833
RSUs issued and outstanding	20,789	55,536
Warrants issued and outstanding	5,968,876	748,872
Convertible notes	67,655	26,785
Total	8,668,528	1,857,532

Preferred Stock

The Company's second amended and restated certificate of incorporation authorizes the Company to issue 10,000,000 shares of preferred stock \$0.0001 par value. No shares of preferred stock were issued or outstanding at December 31, 2016 or December 31, 2015.

10. Stock Incentive Plans**2013 Equity Incentive Plan**

Effective November 1, 2013, the Company's board of directors and sole stockholder adopted the Jaguar Animal Health, Inc. 2013 Equity Incentive Plan (the "2013 Plan"). The 2013 Plan allows the Company's board of directors to grant stock options, restricted stock awards and restricted stock unit awards to employees, officers, directors and consultants of the Company. As of December 31, 2013, the Company had reserved 300,000 shares of its common stock for issuance under the 2013 Plan. In April

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

10. Stock Incentive Plans (Continued)

2014, the board of directors amended the 2013 Plan to increase the shares reserved for issuance to 847,533 shares. Following the effective date of the IPO and after effectiveness of any grants under the 2013 Plan that were contingent on the IPO, no additional stock awards will be granted under the 2013 Plan. Outstanding grants continue to be exercisable, however any unissued shares under the plan and any forfeitures of outstanding options do not rollover to the 2014 Stock Incentive Plan.

2014 Stock Incentive Plan

Effective May 12, 2015, the Company adopted the Jaguar Animal Health, Inc. 2014 Stock Incentive Plan ("2014 Plan"). The 2014 Plan provides for the grant of options, restricted stock and restricted stock units to eligible employees, directors and consultants to purchase the Company's common stock. The Company reserved 333,333 shares of common stock for issuance pursuant to the 2014 Plan. The Company added 162,498 shares to the plan in accordance with the Plan that provides for automatic share increases on the first day of each fiscal year in the amount of 2% of the outstanding number of shares of the Company's common stock on last day of the preceding calendar year. The 2014 Plan replaces the 2013 Plan except that all outstanding options under the 2013 Plan remain outstanding until exercised, cancelled or until they expire.

In July 2015, the Company amended the 2014 Plan reserving an additional 550,000 shares under the plan contingent upon approval by the Company's stockholders at the June 2016 annual stockholders meeting. In June 2016, the Company amended the 2014 Plan once again, modifying the increase from 550,000 shares to 1,550,000 shares, which was approved at the 2016 annual stockholders meeting.

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****10. Stock Incentive Plans (Continued)****Stock Options and Restricted Stock Units ("RSUs")**

The following table summarizes incentive plan activity for the years ended December 31, 2016 and 2015:

	Shares Available for Grant	Stock Options Outstanding	RSUs Outstanding	Weighted Average Stock Option Exercise Price	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
2013 Equity Incentive Plan						
Balance December 31, 2014	119,077	659,554	68,902	\$ 2.67		
Additional shares authorized						
Options granted	(176,364)	176,364		\$ 7.00		
Options cancelled	95,784	(95,784)		\$ 2.53		
Options available for grant cancelled upon IPO	(51,863)					
Options cancelled post-IPO not rolled back into the 2013 Plan		(42,128)				
Options exercised		(5,000)		\$ 2.53		
RSUs granted	(1,484)		1,484			
RSUs cancelled	14,850		(14,850)			
2013 Equity Incentive Plan						
Balance December 31, 2015		693,006	55,536	\$ 3.74		
2014 Stock Stock Plan Balance December 31, 2014						
Shares authorized	333,333					
Options granted	(241,500)	241,500		\$ 4.32		
Options cancelled	15,000	(15,000)		\$ 5.09		
Combined Incentive Plan Balance December 31, 2015	106,833	919,506	55,536	\$ 3.87	8.81	\$
2013 Equity Incentive Plan Activity:						
Options cancelled not rolled back into the 2013 Plan		(127,629)		\$ 4.19		
RSUs vested and released			(27,768)			
RSUs cancelled			(6,979)			
2014 Stock Incentive Plan Activity:						
Additional shares authorized	1,712,498					
Options granted	(1,927,121)	1,927,121		\$ 1.97		
Options cancelled	147,778	(147,778)		\$ 2.28		
Combined Incentive Plan Balance December 31, 2016	39,988	2,571,220	20,789	\$ 2.52	8.77	
Options vested and exercisable December 31, 2016		983,147		\$ 3.41	8.25	\$

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Options vested and expected to vest December 31, 2016	2,163,246	\$	2.52	8.73	\$
--	-----------	----	------	------	----

The weighted average grant date weighted average fair value of stock options granted was \$0.86 and \$2.90 per share during the years ended December 31, 2016 and 2015.

The number of option shares that vested in the years ended December 31, 2016 and 2015 was 655,481 shares and 413,063 shares, respectively. The grant date weighted average fair value of option shares that vested in the years ended December 31, 2016 and 2015 was \$722,134 and \$893,974, respectively.

F-33

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****10. Stock Incentive Plans (Continued)**

The grant date weighted-average fair value of options exercised was \$0.43 in the year December 31, 2015 of which there was no intrinsic value. No options were exercised in the year ended December 31, 2016.

The Company granted RSUs in 2014 and 2015 under the 2013 Equity Incentive Plan. The units granted vest upon the occurrence of both a liquidity event and satisfaction of the service-based requirement. The time-based vesting provides that 50% of the RSU will vest on January 1, 2016 and the remaining 50% vest on July 1, 2017. The Company began recording stock-based compensation expense relating to the RSU grants effective May 18, 2015, the date of the Company's initial public offering, and the date the liquidity condition was met. The stock-based compensation expense is based on the grant date fair value which is the equivalent to the fair market value on the date of grant, and is amortized over the vesting period using the straight-line method, net of estimated forfeitures. On January 1, 2016, the Company issued 17,546 shares of its common stock in exchange for 27,768 vested and released RSUs, net of 10,172 RSU shares used to pay withholding taxes.

Stock-Based Compensation

The following table summarizes stock-based compensation expense related to stock options and RSUs for the three months ended December 31, 2016 and 2015, and are included in the statements of operations and comprehensive loss as follows:

	Years Ended December 31,	
	2016	2015
Research and development expense	\$ 181,489	\$ 472,145
Sales and marketing expense	73,679	54,115
General and administrative expense	462,759	465,905
Total	\$ 717,927	\$ 992,165

As of December 31, 2016, the Company had \$1,263,950 of unrecognized stock-based compensation expense for options and restricted stock units outstanding, which is expected to be recognized over a weighted-average period of 1.9 years.

The estimated grant-date fair value of employee stock options was calculated using the Black-Scholes option-pricing model using the following assumptions:

	Years Ended December 31,	
	2016	2015
Weighted-average volatility	66.25 - 72.08%	55.43 - 61.51%
Weighted-average expected term (years)	5.00 - 5.82	5.15 - 5.82
Risk-free interest rate	1.10 - 2.15%	1.60 - 1.84%
Expected dividend yield		

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****10. Stock Incentive Plans (Continued)**

The estimated grant-date fair value of non-employee stock options was calculated using the Black-Scholes option-pricing model using the following assumptions:

	Years Ended December 31,	
	2016	2015
Weighted-average volatility	78.30 - 80.04%	76.63%
Weighted-average expected term (years)	9.19 - 10.00	9.69
Risk-free interest rate	1.32 - 2.46%	2.25%
Expected dividend yield		

11. Net Loss Per Share Attributable to Common Stockholders

The following table presents the calculation of basic and diluted net loss per common share for the years ended December 31, 2016 and 2015:

	December 31, 2016	December 31, 2015
Net loss attributable to common shareholders	\$ (14,733,780)	\$ (16,637,924)
Shares used to compute net loss per common share, basic and diluted	10,951,178	6,153,139
Net loss per share attributable to common shareholders, basic and diluted	\$ (1.35)	\$ (2.70)

Basic net loss per share is calculated by dividing net loss by the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing net loss by the weighted-average number of common shares and common share equivalents outstanding for the period. Common stock equivalents are only included when their effect is dilutive. The Company's potentially dilutive securities which include stock options, convertible preferred stock and common stock warrants have been excluded from the computation of diluted net loss per share as they would be anti-dilutive. For all periods presented, there is no difference in the number of shares used to compute basic and diluted shares outstanding due to the Company's net loss position.

The following outstanding common stock equivalents have been excluded from diluted net loss per common share for the years ended December 31, 2016 and 2015 because their inclusion would be anti-dilutive:

	December 31, 2016	December 31, 2015
Options issued and outstanding	2,571,220	919,506
Warrants to purchase common stock	5,968,876	748,872
Restricted stock units	20,789	55,536
Total	8,560,885	1,723,914

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****12. Income Taxes**

The Company's loss before provision for income taxes during the years ended December 31, 2016 and 2015, was a domestic loss of \$14,733,780 and \$16,291,550, respectively.

Due to continued losses for the year ending December 31, 2016, and a full valuation allowance, the Company has not recorded a provision for income taxes for the years ending December 31, 2016 or 2015.

The components of the provision for income taxes during the years ended December 31, 2016 and 2015 is as follows:

	December 31, 2016	December 31, 2015
Current:		
Federal	\$	\$
State		
Foreign		
Total Current		
Deferred:		
Federal	(4,387,544)	(4,197,007)
State	(1,249,149)	(587,696)
Foreign		
Total Deferred	(5,636,693)	(4,784,703)
Valuation Allowance	5,636,693	4,784,703
Total Provision for Income Taxes	\$	\$

The Company's effective tax during the years ended December 31, 2016 and 2015, differed from the federal statutory rate as follows:

	December 31, 2016	December 31, 2015
Statutory Rate	(34.0)%	(34.0)%
State Taxes	(5.6)%	(3.6)%
Tax Credits	(0.5)%	5.2%
Other	1.8%	1.7%
Valuation Allowance	38.3%	30.7%
Effective Tax Rate	0.0%	0.0%

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****12. Income Taxes (Continued)**

Net deferred tax assets as of December 31, 2016 and 2015 consist of the following:

	December 31, 2016	December 31, 2015
Non-current Deferred Tax Assets:		
Net Operating Costs	\$ 9,626,610	\$ 7,459,489
Tax Credits	374,605	261,851
Stock Compensation	297,438	188,602
Fixed Assets and Intangibles	3,700,557	470,577
Other	93,434	75,432
	14,092,644	8,455,951
Valuation Allowance	(14,092,644)	(8,455,951)
Net Non-current Deferred Tax Assets	\$	\$

A valuation allowance is provided when it is more likely than not that the deferred tax assets will not be realized. The Company has established a valuation allowance to offset net deferred tax assets as of December 31, 2016 and 2015, due to the uncertainty of realizing future tax benefits from its net operating loss carryforwards and other deferred tax assets.

The valuation allowance increased by \$5,636,693 during the year ended December 31, 2016.

As of December 31, 2016, the Company had federal and California net operating loss carryovers of approximately \$24,543,368 and \$17,103,817, respectively. The federal and California net operating losses will begin to expire in 2033.

As of December 31, 2016, the Company had federal and California research credit carryovers of approximately \$279,793 and \$285,554, respectively. The federal research credits will begin to expire in 2033. The California research credits carry forward indefinitely.

Utilization of the domestic NOL and tax credit forwards may be subject to a substantial annual limitation due to ownership change limitations that may have occurred or that could occur in the future, as required by the Internal Revenue Code Section 382, as well as similar state provisions. In general, an "ownership change," as defined by the code, results from a transaction or series of transactions over a three-year period resulting in an ownership change of more than 50 percentage points of the outstanding stock of a company by certain stockholders or public groups. Any limitation may result in expiration of all or a portion of the NOL or tax credit carryforwards before utilization.

In November 2015, the FASB issued Accounting Standards Update 2015-17, which simplifies the presentation of deferred income taxes by requiring that deferred tax assets and liabilities be presented as non-current. The standard impacts presentation only. The Company elected to early adopt the standard on a retrospective basis effective December 31, 2015, and all deferred tax assets and liabilities are classified as non-current on the Company's consolidated balance sheets. Adoption of this ASU had no effect on the Company's balance sheet for 2015 as presented.

Uncertain Tax Positions

The Company has adopted the provisions of ASC 740, "Income Taxes Related to Uncertain Tax Positions." Under these principals, tax positions are evaluated in a two-step process. The Company first

Table of Contents**Jaguar Animal Health, Inc.****Notes to Financial Statements (Continued)****12. Income Taxes (Continued)**

determines whether it is more-likely-than-not that a tax position will be sustained upon examination. If a tax position meets the more-likely-than-not recognition threshold it is then measured to determine the amount of benefit to be recognized in the financial statements. The tax position is measured as the largest amount of benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement.

The following is a reconciliation of the beginning and ending amount of our total gross unrecognized tax benefit liabilities:

	December 31, 2016	December 31, 2015
Gross Unrecognized Tax Benefit Beginning Balance	\$ 78,930	\$ 31,006
Increases Related to Tax Positions from Prior Years		5,920
Increases Related to Tax Positions Taken During t the Current Year	34,143	42,004
Gross Unrecognized Tax Benefit Beginning Balance	\$ 113,073	\$ 78,930

There are no liabilities from unrecognized tax benefits included in the Company's balance sheet as of December 31, 2016 and 2015, and therefore the Company has not accrued for any penalties or interest.

The Company files income tax returns in the United States and various states, where the statute of limitations are 3 years and 4 years, respectively. The Company remains open for audit by the United States Internal Revenue Service and states state tax jurisdictions since inception.

The Company is not currently under examination by income tax authorities in federal or state jurisdictions.

13. 401(k) Plan

The Company sponsors a 401(k) defined contribution plan covering all employees. There were no employer contributions to the plan from plan inception through December 31, 2016.

14. Subsequent Events

The Company completed an evaluation of the impact of subsequent events through February 15, 2017, the date these financial statements were issued.

Commercialization Agreement

On January 27, 2017, the Company announced it entered into a licensing, development, co-promotion and commercialization agreement with Elanco US Inc. ("Elanco") to license, develop and commercialize Canalevia, a Company drug product candidate under investigation for treatment of acute and chemotherapy-induced diarrhea in dogs, and other drug product formulations of crofelemer for treatment of gastrointestinal diseases, conditions and symptoms in cats and other companion animals (collectively, the "Licensed Products"). The Elanco Agreement grants Elanco exclusive global rights to Canalevia, a product whose active pharmaceutical ingredient is sustainably isolated and purified from the Croton lechleri tree, for use in companion animals. Pursuant to the Elanco Agreement, Elanco will

Table of Contents

Jaguar Animal Health, Inc.

Notes to Financial Statements (Continued)

14. Subsequent Events (Continued)

have exclusive rights globally outside the U.S. and co-exclusive rights with the Company in the U.S. to direct all marketing, advertising, promotion, launch and sales activities related to the Licensed Products.

Under the terms of the Elanco Agreement, the Company received a \$1.5 million upfront payment and will receive additional payments upon achievement of certain development, regulatory and sales milestones in an aggregate amount of up to \$61.0 million payable throughout the term of the Elanco Agreement, as well as product development expense reimbursement, and royalty payments on global sales. The Elanco Agreement specifies that the Company will supply the Licensed Products to Elanco, and that the parties will agree to set a minimum sales requirement that Elanco must meet to maintain exclusivity. The Elanco Agreement also contains provisions regarding payment terms, confidentiality and indemnification, as well as other customary provisions. Elanco will also reimburse the Company for Canalevia-related expenses, including reimbursement for Canalevia-related expenses in Q4 2016, certain development and regulatory expenses related to the Company's planned target animal safety study and the completion of the Company's field study of Canalevia for acute diarrhea in dogs.

2015 Convertible Notes Payable

On January 31, 2017, the Company entered into an amendment to extend the due date of the \$150,000 convertible note payable from January 31, 2017 to January 1, 2018. In exchange for the extension of the maturity date, on January 31, 2017, the Company's board of directors granted the convertible note holder a warrant to purchase 370,916 shares of the Company's common stock for \$0.51 per share. The warrant is exercisable at any time on or before January 31, 2019, the expiration date of the warrant.

Merger Agreement

On February 8, 2017, the Company announced that it had entered into a binding agreement of terms (the "Agreement") to merge with Napo Pharmaceuticals, Inc., the Company's former parent. The transaction was approved by the unanimous vote of independent and disinterested members of each of Jaguar's and Napo's Board of Directors. Napo will operate as a wholly-owned subsidiary of Jaguar, focused on human health. The binding financial terms of the merger include a 3-to-1 Napo-to-Jaguar value ratio to calculate the relative ownership of the combined entity. As of January 31, 2017, Napo owned approximately 19% of Jaguar's outstanding shares of common stock. The Agreement sets forth the financial terms of the merger and customary conditions to closing, which include but are not limited to completion of due diligence, receipt of a fairness opinion, and stockholder and other approvals. Additionally, the financial terms of the merger and conditions to closing include provisions that (i) Napo's secured convertible debt shall not exceed \$10.0 million and its unsecured debt shall not exceed \$3.0 million, and (ii) a third party will invest \$3.0 million in the Company for approximately four million shares of newly issued common stock of the Company with the investment proceeds loaned to Napo immediately prior to the consummation of the merger. The Agreement also provides that if the merger fails to close for any reason on or prior to July 31, 2017, other than as a result directly or indirectly of (x) lack of stockholder approval by either party or (y) Napo (i) failing to perform in accordance with the terms and conditions of the Agreement or (ii) failing to abide by or breaching the provisions or representations, warranties and covenants of the Agreement or the merger documents, then, on or before the close of business on August 7, 2017, the Company will be required to issue 2,000,000 shares of its restricted common stock to Napo.

Table of Contents

Napo Pharmaceuticals, Inc.
Index to Consolidated Financial Statements

	Page
Audited Financial Statements	
<u>Independent Auditor's Report</u>	<u>F-41</u>
<u>Consolidated Balance Sheets as of December 31, 2016 and 2015</u>	<u>F-42</u>
<u>Consolidated Statements of Operations for the years ended December 31, 2016 and 2015</u>	<u>F-43</u>
<u>Consolidated Statement of Changes in Common Stock and Stockholders' Equity (Deficit) for the years ended December 31, 2016 and 2015</u>	<u>F-44</u>
<u>Consolidated Statements of Cash Flows for the years ended December 31, 2016 and 2015</u>	<u>F-45</u>
<u>Notes to Consolidated Financial Statements</u>	<u>F-46</u>
F-40	

Table of Contents

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors and Stockholders
Napo Pharmaceuticals, Inc.
San Francisco, California

We have audited the accompanying consolidated financial statements of Napo Pharmaceuticals, Inc. (a Delaware corporation) and subsidiaries, which comprise the consolidated balance sheets as of December 31, 2016 and 2015, and the related consolidated statements of operations, changes in common stock and stockholders' equity (deficit), and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Napo Pharmaceuticals, Inc. and subsidiaries as of December 31, 2016 and 2015, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company incurred significant operating losses during the year ended December 31, 2016. As described in Note 8 to the financial statements, the Company is in default on its loan agreements. Those conditions raise substantial doubt about its ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our opinion is not modified with respect to that matter.

/s/ Macias Gini & O'Connell LLP
San Francisco, California

March 24, 2017, except for Note 15 Additional Subsequent Events, as to which the date is March 31, 2017

Table of Contents**Napo Pharmaceuticals, Inc.****Consolidated Balance Sheets**

	Year Ended December 31,	
	2016	2015
Assets		
Current assets:		
Cash and cash equivalents	\$ 2,271,745	\$ 689,032
Restricted cash		137,115
Accounts receivable, net of allowance for doubtful accounts of \$184,660 and \$0 at December 31, 2016 and 2015	166,937	120,772
Equity method investment in related party	1,919,999	5,999,998
License fee receivable from related party		425,000
Inventory	982,838	
Prepaid expenses	64,670	54,074
Total Current Assets	5,406,189	7,425,991
Land	396,247	
Total Assets	\$ 5,802,436	\$ 7,425,991
Liabilities and Stockholders' Equity (Deficit)		
Current liabilities:		
Accounts payable	\$ 4,316,819	\$ 3,394,374
Deferred revenue	464,892	
Due to related party	299,648	
Accrued expenses	2,361,232	2,039,253
Marketing advance	250,000	
Current portion of long-term debt	52,577,790	1,783,650
Total current liabilities	60,270,381	7,217,277
Settlement liability	2,500,000	2,500,000
Convertible notes, net	1,919,790	
Financing agreement		36,203,421
Long term debt, net	4,419,790	38,703,421
Total liabilities	\$ 64,690,171	\$ 45,920,698
Commitments and Contingencies (Note 7)		
Stockholders' Equity (Deficit)		
Common stock: \$0.0001 par value, 175,000,000 shares authorized at December 31, 2016 and December 31, 2015; 108,202,786 and 108,452,786 shares issued and outstanding at December 31, 2016 and December 31, 2015, respectively.	10,819	10,844
Additional paid-in capital	98,539,747	98,539,722
Accumulated deficit	(157,438,301)	(137,045,273)
Total stockholders' equity (deficit)	(58,887,735)	(38,494,707)
Total liabilities and stockholders' equity (deficit)	\$ 5,802,436	\$ 7,425,991

The accompanying notes are an integral part of these financial statements.

F-42

Table of Contents**Napo Pharmaceuticals, Inc.****Consolidated Statements of Operations**

	Years Ended December 31,	
	2016	2015
Revenue, net of allowances	\$ 987,312	\$ 390,953
Cost of revenue	(726,506)	(174,949)
Gross profit	260,806	216,004
Operating expenses		
Research and development expense	127,137	1,672,472
Selling, general and administrative expense	2,725,925	2,618,066
Total operating expenses	2,853,062	4,290,538
Loss from operations	(2,592,256)	(4,074,534)
Interest expense, net	(15,609,092)	(8,048,674)
Gain on disposition of related party		29,961,150
Impairment of equity method investment in related party	(574,059)	(9,751,974)
Gain on litigation settlement	1,888,319	
Change in fair value of warrants		(267,867)
Loss from equity method investment in related party	(3,505,940)	(2,915,090)
Consolidated net income (loss)	(20,393,028)	4,903,011
Net loss attributable to non-controlling interest		406,150
Consolidated net income (loss) attributable to Napo Pharmaceuticals, Inc.	\$ (20,393,028)	\$ 5,309,161

The accompanying notes are an integral part of these financial statements

Table of Contents**Napo Pharmaceuticals, Inc.****Consolidated Statement of Changes in Common Stock and Stockholders' Equity (Deficit)**

	Series A Convertible Preferred Stock		Common Stock		Additional paid-in capital	Noncontrolling Interest	Accumulated deficit	Total Stockholders' Equity(Deficit)
	Shares	Amount	Shares	Amount				
Balances December 31, 2014	3,015,902	\$ 7,304,914	108,452,786	\$ 10,844	\$ 111,455,067	\$ (636,583)	\$ (142,354,434)	\$ (24,220,192)
Deconsolidation of related party on its issuance of common stock in connection with its initial public offering in May 2015	(3,015,902)	(7,304,914)			(12,915,345)	1,042,733		(19,177,526)
Loss attributable to non-controlling interest						(406,150)		(406,150)
Consolidated net income							5,309,161	5,309,161
Balances December 31, 2015			108,452,786	\$ 10,844	\$ 98,539,722	\$	\$ (137,045,273)	\$ (38,494,707)
Net loss							(20,393,028)	(20,393,028)
Cancellation of common stock			(250,000)	(25)	25			
Balances December 31, 2016		\$	108,202,786	\$ 10,819	\$ 98,539,747	\$	\$ (157,438,301)	\$ (58,887,735)

The accompanying notes are an integral part of these financial statements.

Table of Contents**Napo Pharmaceuticals, Inc.****Consolidated Statements of Cash Flow**

	Years Ended December 31,	
	2016	2015
Cash Flows from Operating Activities		
Consolidated net income (loss)	\$ (20,393,028)	\$ 5,309,161
Adjustments to reconcile net loss to net cash used in operating activities:		
Gain on disposal of Jaguar Animal Health, Inc.		(29,961,150)
Impairment of equity method investment in related party	574,059	9,751,974
Gain on litigation settlement	(1,888,319)	
Loss from investment in related party	3,505,940	2,915,090
De-consolidation of related party		7,272,553
Interest and penalties on notes payable	14,590,719	5,997,784
Gain attributable to noncontrolling interest		(406,150)
<i>Changes in assets and liabilities:</i>		
Accounts receivable, net of allowances for doubtful accounts	(46,165)	(120,772)
License fee receivable	425,000	1,225,000
Inventory	509,234	
Prepaid expenses	(10,596)	15,345
Accounts payable	874,816	(124,341)
Deferred revenue	464,892	(23,802)
Due to related party	299,648	
Accrued expenses	369,608	(890,573)
Marketing advance	250,000	
Total Cash Provided By (Used In) Operations	(474,192)	960,119
Cash Flows from Financing Activities		
Proceeds from issuance of long-term debt, net	1,919,790	
Payments on notes payable		(1,066,716)
Total Cash Provided By (Used In) Financing Activities	1,919,790	(1,066,716)
Net increase (decrease) in cash and cash equivalents	1,445,598	(106,597)
Cash and cash equivalents, beginning of period	826,147	932,744
Cash and Cash Equivalents, End of Period	\$ 2,271,745	\$ 826,147

Supplemental Cash Flow information including Non-Cash Financing and Investing Activities

Interest paid in cash

The accompanying notes are an integral part of these financial statements

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements

1. Organization and Business

Napo Pharmaceuticals, Inc. ("NPI"), (collectively with its subsidiaries "Napo" or "the Company") was incorporated on November 15, 2001 in Delaware and is focused on licensing, developing and commercialization of propriety specialty pharmaceuticals for the global marketplace in collaboration with development partners.

In March 2016, Napo settled ongoing litigation with Salix Pharmaceuticals, Inc. (Salix) (now owned by Valeant Pharmaceuticals International) and rights to develop, manufacture and commercialize crofelemer previously licensed to Salix in December 2008 in North America, certain European Union countries and Japan were terminated and returned to Napo, along with certain crofelemer active pharmaceutical ingredient inventory and Mytesi® drug product inventory and land. Napo recorded the inventory received at its manufactured cost and the land at its appraised value and recorded a gain on settlement of litigation.

Napo's drug product, Mytesi® (crofelemer), which it had developed along with Salix is approved by the FDA for the symptomatic relief of non-infectious diarrhea in adult patients living with HIV/AIDS on anti-retroviral therapy. Napo operates in one segment, pharmaceuticals for human use.

Jaguar Animal Health, Inc. ("Jaguar") was incorporated on June 6, 2013 in Delaware and on June 11, 2013, Jaguar issued 2,666,666 shares of common stock to Napo in exchange for cash and services. On July 1, 2013, Jaguar entered into an employee leasing and overhead agreement (the "Service Agreement") with Napo, under which Napo agreed to provide Jaguar with the services of certain Napo employees for research and development and the general administrative functions. On January 27, 2014, Jaguar executed an intellectual property license agreement with Napo pursuant to which Napo transferred fixed assets and development materials, and licensed intellectual property and technology to Jaguar (See Note 5). On February 28, 2014, the Service Agreement terminated and the associated employees became employees of Jaguar effective March 1, 2014.

Jaguar was a majority-owned subsidiary of NPI until the close of its Initial Public Offering ("IPO") on May 18, 2015 (see below). Jaguar was formed to develop and commercialize first-in-class gastrointestinal products for companion and production animals and horses. Jaguar's first commercial product, Neonorm Calf, was launched in 2014.

On February 8, 2017, Jaguar announced that its Board of Directors had approved a binding letter of intent, subject to certain conditions to acquire Napo. Jaguar will be the surviving entity along with its board of directors and officers (See Note 14).

Initial Public Offering Jaguar

On May 18, 2015, Jaguar completed an IPO of its common stock at a price to the public of \$7.00 per share. In connection with the IPO, Napo deconsolidated Jaguar on this date due to a reduction in its ownership interest in Jaguar. Subsequent to the IPO, Napo owned approximately 33%, 33% and 19% of the outstanding shares of Jaguar at May 18, 2015, December 31, 2015 and December 31, 2016, respectively. Accordingly, management concluded that Napo is able to have significant influence over the operations of Jaguar. Subsequent to Jaguar's IPO, Napo has accounted for its holding in Jaguar using the equity method of accounting.

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

1. Organization and Business (Continued)

Going Concern

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. The Company has incurred recurring operating losses since inception and has an accumulated deficit of \$157,438,301 as of December 31, 2016. Napo is in default on certain of its liabilities (See Note 8) and the Company expects to incur substantial losses in future periods. Further, the Company's future operations are dependent on the success of the Company's ongoing development and commercialization efforts. There is no assurance that profitable operations, if ever achieved, could be sustained on a continuing basis.

The merger of Napo and Jaguar is expected to offer greater access to the capital markets because of the combined companies larger market capitalization. If the merger is not consummated for some reason, Napo plans to finance its operations and capital funding needs through licensing activities, equity and/or debt issuances as well as revenue from future product sales. However, there can be no assurance that additional funding will be available to the Company on acceptable terms on a timely basis, if at all, or that the Company will generate sufficient cash from operations to adequately fund operating needs or ultimately achieve profitability. If the Company is unable to obtain an adequate level of financing needed for the long-term development and commercialization of its products, the Company will need to curtail planned activities and reduce costs. Doing so will likely have an adverse effect on the Company's ability to execute on its business plan. These matters raise substantial doubt about the ability of the Company to continue in existence as a going concern. The accompanying financial statements do not include any adjustments that might result from the outcome of these uncertainties.

2. Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). The consolidated financial statements include the accounts of Jaguar from January 1, 2015 until its IPO on May 18, 2015. All significant inter-company balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires the Company's management to make judgments, assumptions and estimates that affect the amounts reported in its financial statements and the accompanying notes. The accounting policies that reflect the Company's more significant estimates and judgments and that the Company believes are the most critical to aid in fully understanding and evaluating its reported financial results are valuation of equity compensation; impairment of long lived assets; deferred taxes and valuation allowances on deferred tax assets; and evaluation and measurement of contingencies. Those estimates could change, and as a result, actual results could differ materially from those estimates.

Concentration of Credit Risk and Cash

The financial instrument that potentially subjects the Company to a concentration of credit risk is cash that is held at a financial institution of high credit standing. Cash balances are generally in excess

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

of Federal Deposit Insurance Corporation ("FDIC") insurance limits. At December 31, 2016 and 2015 the Company had \$1,722,983 and \$439,032, respectively, in excess of FDIC insurance limits. At December 31, 2015 the Company had \$137,115 in restricted cash related to a control account. A percentage of the royalties payable to Napo from the Salix Collaboration Agreement (See Note 5) were deposited in this account. These funds were used to repay principal on the Financing Agreement (See Note 8). This account was closed in 2016.

Investment in Related Party

The Company's investment in Jaguar is accounted for using the equity method as the Company has determined that its shareholdings, and related officer and Board member, provided it the ability to exercise significant influence, but not control, over Jaguar subsequent to its IPO. Significant influence is generally deemed to exist if the Company has an ownership interest in the voting stock of the investee between 20% and 50%, although other factors, such as representation on the investee's Board of Directors or having related officers, are considered in determining whether the equity method is appropriate. The Company recorded a loss of \$3,505,940 and \$2,915,090, respectively, related to its investment in Jaguar for the years ended December 31, 2016 and 2015. For the years ended December 31, 2016 and 2015, Napo recorded an impairment loss of \$574,059 and \$9,751,974, respectively related to its investment in Jaguar.

Inventories

Inventories are stated at the lower of cost or market. Napo had no inventory as of December 31, 2015. Napo's inventory at December 31, 2016 consisted of \$632,825 of Mytesi® drug product and \$350,013 of crofelemer active pharmaceutical ingredient. The Mytesi® drug product is valued at its manufactured cost. The crofelemer active pharmaceutical ingredient was transferred to Napo via its settlement with Salix Pharmaceuticals, Inc. (See Note 12) and is valued at the invoiced price paid by Salix.

Napo adjusts its inventory valuation when conditions indicate that the net realizable value is less than cost due to physical deterioration, usage, obsolescence, reductions in estimated future demand or reduction in selling price. There were no inventory write-downs in the year ended December 31, 2016.

Land

Land represents property acquired in settlement of the Salix Litigation (See Notes 6 and 12).

Debt Issuance Costs

Debt discount and legal costs related to the issuance of convertible debt at December 31, 2016 are shown as a reduction of the carrying value of the debt and will be amortized as interest expense over the term of the related debt using the straight-line method, which approximates the effective interest method.

Research and Development Expense

Napo incurred limited research and development activities in the years ended December 31, 2015 and 2016. Research and development expense consists of expenses incurred in performing research and

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

development activities including related salaries and the costs of consultants. Research and development expense is charged to operating expense in the period incurred. Napo does anticipate that such costs will increase significantly in the coming years.

Revenue Recognition

Napo sells its drug product, Mytesi®, on consignment through one distributor, that in turn sells to various wholesalers in the United States. Sales to the wholesalers are made under agreements that may provide price adjustments and rights of return prior to sell through. Until Napo develops sufficient sales history and pipeline visibility, revenue recognition is deferred until products are sold by the wholesaler to the wholesaler's customers. The Company had \$987,312 and \$390,953 of revenue (including royalties received) for the years ended December 31, 2016 and 2015, respectively.

Pursuant to a license agreement with Salix, Napo recorded royalty revenue on a quarterly basis in 2015 and up to March 4, 2016. Royalty revenue was \$31,729 and \$276,999 in the years ended December 31, 2016 and 2015, respectively. These royalties are recognized in the period in which sales are made by the licensee.

Stock-Based Compensation

Napo's 2006 Equity Incentive Plan (See Note 9) provides for the grant of stock options, restricted stock and restricted stock unit awards.

Napo has not issued any stock options during the years ended December 31, 2016 and 2015. All option awards were fully vested prior to January 1, 2015. Napo issued restricted stock units to employees, directors and consultants annually in the years 2008-2013 and again in 2015 and 2016. The Company has determined that the fair value of RSUs vested during 2015 and 2016 to be diminimus.

Classification of Securities

The Company applies the principles of ASC 480-10 "Distinguishing Liabilities from Equity" and ASC 815-40 "Derivatives and Hedging Contracts in Entity's Own Equity" to determine whether financial instruments such as warrants, contingently issuable shares and shares subject to repurchase should be classified as liabilities or equity and whether beneficial conversion features exist. At December 31, 2016 and 2015 all such financial instruments were classified as equity.

Income Taxes

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the financial statements or in the Company's tax returns. Deferred taxes are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent it believes, based upon the weight of available evidence, that it is more likely than not that all or a portion of deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential for recovery of deferred tax assets is

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

evaluated by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

The Company accounts for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate, as well as the related net interest and penalties.

Recent Accounting Pronouncements

In August 2016, the FASB issued Accounting Standards Update No. 2016-15, *Statement of Cash Flows* (Topic 230) ("ASU No. 2016-15"). ASU No. 2016-15 addresses how certain cash receipts and cash payments are presented and classified in the statement of cash flows. ASU No. 2016-15 is effective for the Company in the first quarter of 2018, with early adoption permitted, and is to be applied using a retrospective approach. The Company is expected to adopt the provisions of ASU 2016-15 on January 1, 2017, and the provisions are not expected to have a material impact on the Company's financial position or results of operations.

In June 2016, the FASB issued Accounting Standards Update No. 2016-13, *Financial Instruments - Credit Losses* (Topic 326) ("ASU No. 2016-13"). ASU No. 2016-13 revises the methodology for measuring credit losses on financial instruments and the timing of when such losses are recorded. ASU No. 2016-13 is effective for the Company in the first quarter of 2020, with early adoption permitted, and is to be applied using a modified retrospective approach. The Company is currently evaluating the potential effects of adopting the provisions of ASU No. 2016-13.

In March 2016, the FASB issued Accounting Standards Update No. 2016-06, *Derivatives and Hedging - Contingent Put and Call Options in Debt Instruments* (Topic 815) ("ASU No. 2016-06"). ASU No. 2016-06 clarifies the steps required to assess whether a call or put option meets the criteria for bifurcation as an embedded derivative. Effective April 3, 2016, the Company adopted the provisions of ASU No. 2016-06 on a prospective basis. The adoption of the provisions of ASU No. 2016-06 did not materially impact the Company's consolidated financial position or results of operations.

In January 2016, the FASB issued Accounting Standards Update No. 2016-01, *Financial Instruments - Recognition and Measurement of Financial Assets and Financial Liabilities* (Topic 825) ("ASU No. 2016-01"). ASU No. 2016-01 revises the classification and measurement of investments in certain equity investments and the presentation of certain fair value changes for certain financial liabilities measured at fair value. ASU No. 2016-01 requires the change in fair value of many equity investments to be recognized in net income. ASU No. 2016-01 is effective for the Company in the first quarter of 2018, with early adoption permitted, and is to be applied prospectively. The Company is currently evaluating the potential effects of adopting the provisions of ASU No. 2016-01.

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

In November 2015, the FASB issued Accounting Standards Update No. 2015-17, *Income Taxes - Balance Sheet Classification of Deferred Taxes* (Topic 740) ("ASU No. 2015-17"). ASU No. 2015-17 requires deferred tax liabilities and assets to be classified as noncurrent in the consolidated balance sheet. ASU No. 2015-17 is effective for the Company in the first quarter of 2017, with early adoption permitted. ASU No. 2015-17 may be applied either prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. Effective October 2, 2016, the Company adopted the provisions of ASU No. 2015-17 on a prospective basis. The adoption of the provisions of ASU No. 2015-17 resulted in a reclassification of deferred tax liabilities and assets from current to noncurrent and did not materially impact the Company's consolidated financial position or results of operations.

In July 2015, the FASB issued Accounting Standards Update No. 2015-11, *Inventory - Simplifying the Measurement of Inventory* (Topic 330) ("ASU No. 2015-11"). ASU No. 2015-11 requires an entity to measure inventory within the scope of the update at the lower of cost and net realizable value, and defines net realizable value as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Effective January 1, 2016, the Company adopted the provisions of ASU No. 2015-11 on a prospective basis. The adoption of the provisions of ASU No. 2015-11 did not materially impact the Company's consolidated financial position or results of operations.

In May 2014, the FASB issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers* (Topic 606) ("ASU No. 2014-09"). ASU No. 2014-09 supersedes all existing revenue recognition guidance. Under ASU No. 2014-09, an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU No. 2014-09 is effective for the Company in the first quarter of 2018, with early adoption permitted in the first quarter of 2017. ASU No. 2014-09 allows for either full retrospective or modified retrospective adoption. In March, April, May, and December 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net)* ("ASU No. 2016-08"); ASU No. 2016-10, *Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing* ("ASU No. 2016-10"); ASU No. 2016-12, *Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients* ("ASU No. 2016-12"); and ASU No. 2016-19, *Technical Corrections and Improvements* ("ASU No. 2016-19"), respectively. ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-12, and ASU No. 2016-19 provide supplemental adoption guidance and clarification to ASU No. 2014-09, and must be adopted concurrently with the adoption of ASU No. 2014-09. The Company is currently evaluating the potential effects of adopting the provisions of ASU No. 2014-09, ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-12, and ASU No. 2016-19.

3. Fair Value Measurements

ASC 820 "Fair Value Measurements," defines fair value, establishes a framework for measuring fair value under generally accepted accounting principles and enhances disclosures about fair value measurements. Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

3. Fair Value Measurements (Continued)

Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs. The standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value which are the following:

Level 1 Quoted prices in active markets for identical assets or liabilities;

Level 2 Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data; and

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

Liabilities Measured at Fair Value on a Recurring Basis

At December 31, 2016 and 2015, no liabilities were required to be measured at fair value on a recurring basis. There were no transfers in or out of either Level 1, Level 2, or Level 3 fair value measurements during the years ended December 31, 2016, and 2015.

4. Employee Leasing and Overhead Allocation Agreement

Effective July 1, 2016, Napo and Jaguar entered into an employee leasing and overhead allocation agreement (the "2016 Service Agreement"). The initial term of the 2016 Service Agreement was from July 1, 2016 to December 31, 2016, and the term has been extended into 2017. In connection with the Service Agreement, Jaguar provided to Napo the services of Jaguar employees, primarily in the areas of supply, manufacturing and quality control. The 2016 Service Agreement stipulated that Napo reimburse Jaguar for a portion of Jaguar's overhead costs.

5. License Agreements

Jaguar Animal Health, Inc.

On July 11, 2013, Napo entered into an option to license Napo's intellectual property and technology (the "Option Agreement") to Jaguar. Under the Option Agreement, upon the payment of \$100,000 in July 2013, Jaguar obtained an option for a period of two years to execute an exclusive worldwide license to Napo's intellectual property and technology to use for its animal health business. The option price was creditable against future license fees to be paid to Napo under the License Agreement (as defined below).

In January 2014, Jaguar exercised its option and entered into a license agreement (the "License Agreement") with Napo for an exclusive worldwide license to Napo's intellectual property and technology to permit Jaguar to develop, formulate, manufacture, market, use, offer for sale, sell, import, export, commercialize and distribute products for veterinary treatment uses and indications for all species of animals. Jaguar was originally obligated to pay a one-time non-refundable license fee of \$2,000,000, less the option fee of \$100,000. At the Jaguar's option, the license fee could have been paid in common stock. Milestone payments aggregating \$3,150,000 may also be due to Napo based on regulatory approvals of various veterinary products. In addition to the milestone payments, Jaguar will

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

5. License Agreements (Continued)

owe Napo an 8% royalty on annual net sales of products derived from the Croton lechleri tree, up to \$30,000,000 and then, a royalty of 10% on annual net sales of \$30,000,000 or more. Additionally, if any other products are developed, Jaguar will owe Napo a 2% royalty on annual net sales of pharmaceutical prescription products that are not derived from Croton lechleri and a 1% royalty on annual net sales of nonprescription products that are not derived from Croton lechleri. The royalty term expires at the longer of 10 years from the first sale of each individual product or when there is no longer a valid patent claim covering any of the products and a competitive product has entered the market. However, because an IPO of at least \$10,000,000 was consummated prior to December 31, 2015, the royalty was reduced to 2% of annual net sales of its prescription products derived from Croton lechleri and 1% of net sales of its nonprescription products derived from Croton lechleri and no milestone payment will be due and no royalties will be owed on any additional products developed.

The License Agreement also transferred to Jaguar certain materials and equipment.

Jaguar has agreed under the License Agreement to defend, indemnify and hold Napo, its affiliates, and the officers, directors, employees, consultants and contractors of Napo harmless from and against any losses, costs, damages, liabilities, fees and expenses arising out of any third-party claim related to the Jaguar's gross negligence, breach of covenants or the manufacture, sale or use of the product or products.

In January 2015, the License Agreement was amended to decrease the one-time non-refundable license fee payable from \$2,000,000 to \$1,750,000 in exchange for acceleration of the payment of the fee. In 2015, payments totaling \$1,225,000 were made, with the balance of \$425,000 paid in the quarter ended March 31, 2016, which is included in License Fee Receivable on the Company's balance sheet at December 31, 2015. The revenue related to the License Agreement was recorded by the Company prior to the deconsolidation of Jaguar.

License Agreement with Salix Pharmaceuticals, Inc.

In December 2008, Napo and Salix Pharmaceuticals, Inc. ("Salix") entered into a collaboration agreement for the development and commercialization of crofelemer for the indications of HIV/AIDs diarrhea, pediatric diarrhea and acute adult infectious diarrhea in North America, most western EU countries and Japan (the "Salix Collaboration Agreement"). Salix also acquired worldwide rights for the development and commercialization of crofelemer for diarrhea predominant irritable bowel syndrome, as well as any other indication of crofelemer for human use. Salix paid an up-front license fee and the Salix Collaboration Agreement called for milestone payments based on regulatory approval and net sales of crofelemer derived products, as well as royalties on the net sales of crofelemer derived products. Other than the indication of crofelemer for HIV/AIDS diarrhea (which ultimately became the FDA approved drug Mytesi®), no other indications of crofelemer were approved.

In May 2011, Napo sued Salix with regard to Salix's performance under the Salix Collaboration Agreement. In February 2014, Salix prevailed in a jury trial, and Napo appealed the verdict. In March 2016, Napo and Salix entered into a Settlement, Termination, Asset Transfer and Transition Agreement, which settled the ongoing litigation between the parties, terminated the Salix Collaboration Agreement and transferred certain assets and inventory, including with respect to the approved drug Mytesi®, to Napo (See Note 12).

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

5. License Agreements (Continued)

License Agreement with Glenmark Pharmaceuticals Limited

In 2005 Napo entered into a collaboration agreement with Glenmark Pharmaceuticals Limited (the Glenmark Collaboration Agreement) for the development of crofelemer for the indications of for HIV/AIDS diarrhea, pediatric diarrhea and adult acute infectious diarrhea in approximately 140 countries outside of the United States, Japan, most EU countries and Japan. The Glenmark Collaboration Agreement provides for royalties to be paid to Napo based upon net sales of crofelemer derived products in the licensed territories. In 2011, the parties entered into arbitration proceeding regarding clarification of certain terms as well as disputes over crofelemer development and commercialization activities referred to in the Glenmark Collaboration Agreement. The arbitration was settled in December 2013 (See Note 12).

Glenmark has obtained marketing approval for the crofelemer derived product for control and symptomatic relief of diarrhea in patients living with HIV/AIDS in two countries in Africa and two in South America. Two of these four countries have also approved the crofelemer derived product for control and symptomatic relief of diarrhea in patients with acute infectious diarrhea. Napo has not received any royalty income from these approvals nor is it aware of any sales made by Glenmark in its licensed territories.

License Agreement with Luye Pharmaceuticals, Inc.

In 2005, Napo entered into a license agreement with Luye Pharmaceuticals (Luye) for the development of crofelemer for HIV/AIDS diarrhea, pediatric diarrhea and adult acute infectious diarrhea for the People's Republic of China including Macao and Hong Kong. The license agreement provided for Napo to receive royalties on net sales of crofelemer derived products. To date, Luye has not developed crofelemer for any indications in its licensed territory and the Company has not received any royalty income from Luye.

Distribution and Marketing Agreements

The Company has agreements in place with BexR, a distributor in Texas and as well as a marketing and commercialization advisory firm for the distribution, marketing and sale of Mytesi®, its FDA approved drug product for the systematic relief of non-infectious diarrhea in adult patients living with HIV/AIDS on antiretroviral therapy. The agreements compensate these parties with a percentage of net sales, as defined. As part of the agreement entered into with its distributor, Napo received a marketing advance of \$250,000 in June 2016 which was to be repaid quarterly, beginning six months after the advance was made, at a rate equal to 10% of net sales in the first quarter following the six-month period, then 15% of net sales in the next quarter, then 25% of net sales in the next quarter until fully repaid. Napo was to begin repaying the advance from net sales made in December 2016, but in February 2017 entered into an agreement to defer the repayment period to July 2017 to January 2018 (See Note 14). In its agreement with its distributor, Napo agreed to spend \$700,000 on product materials and marketing over the first twelve months of the agreement, inclusive of amounts paid to the marketing and commercialization advisory firm mentioned above and the marketing advance.

6. Land

The Company's land consists of several separate parcels of land that collectively comprise 490 hectares in Peru, which was transferred to Napo in connection with the settlement of the Salix

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

6. Land (Continued)

Litigation (See Note 12) in March 2016. There are Croton lechleri trees growing on the land and in the future, once the Croton lechleri trees are mature, the crude plant latex derived therefrom could be used in connection with the manufacture of crofelemer. The recorded value of the land of \$396,247 was based upon a third party appraisal.

7. Commitments and Contingencies

License Agreement with Michael Tempesta

The Company has entered into a license agreement in October 2002 with Dr. Michael Tempesta. The agreement provides for the payment of a royalty to Dr. Tempesta of between 2% and 4% of net sales of products containing crofelemer or any derivative thereof obtained from any species of the Croton lechleri plant. For the purposes of calculating royalties, "product" is defined as all products for the treatment, maintenance or improvement of human health which are prescription medicines, botanicals, dietary supplements sold for the treatment of diarrhea, Irritable Bowel Syndrome ("IBS") or herpes. This excludes cosmetic products, non-medicinal agricultural products and products for non-human animal health.

Royalty Agreements

Cap Global LLC

The Company entered into a royalty agreement with a group of investors in 2009 in exchange for funding to expedite the development of (i) crofelemer for HIV/AIDS diarrhea and (ii) for a pediatric indication of crofelemer. The investors are entitled to receive, collectively, 0.47% of net sales of crofelemer in western territories, including North America, most EU countries and Japan, until such time that they have received cumulatively a total return of \$5.2 million.

Glenmark Pharmaceuticals Limited

On December 9, 2008, Napo entered into a royalty agreement with Glenmark Pharmaceuticals Limited whereby it agreed to pay Glenmark royalties of 1% of the Net Sales of crofelemer in western territories. This agreement was to remain in effect until such time as Napo is no longer receiving royalties from the sale of crofelemer products in western territories. As of March 2016, Napo stopped receiving royalties from the sale of crofelemer products in western territories.

Healing Forest Conservancy

Napo entered into a perpetual agreement with the Healing Forest Conservancy ("HFC") pursuant to which Napo has issued to HFC 30,000 common shares in Napo at a purchase price of \$0.0001 each and has agreed to pay 2% of the net profit derived from the sale of all of its products to HFC once Napo has achieved net profits after tax over a consecutive period of 6 months. The aim of Napo's arrangement with HFC is, amongst other things, (i) to promote the conservation of the biological diversity of tropical forests, particularly medicinal plants (ii) to promote the survival of cultural diversity of tropical forest peoples, and in particular, their traditional knowledge of medicinal plants, (iii) to develop and implement a process to return financial benefits from net profits made on certain products to collaborating countries and cultural groups, (iv) to promote initiatives addressing total community health for developing and emerging communities; and (v) to lead efforts to encourage sustainable

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

7. Commitments and Contingencies (Continued)

global communication and participation from other organizations, including corporate, non-governmental organizations, governmental agencies, and others. No royalty payments were made to the HFC in the years ended December 31, 2016 and 2015.

Contingencies

From time to time, the Company may be involved in legal proceedings arising in the ordinary course of business. The Company believes there is no litigation pending that could have, individually or in the aggregate, a material adverse effect on the financial position, results of operations or cash flows.

Napo entered into a settlement agreement regarding its litigation and the termination of its license agreement with Salix. (See Note 12). The terms of the settlement provide that Salix will receive 15% of the proceeds of any license agreement or royalties from net sales derived from territories in former Salix licensed territories or the sale of the Company (a sale or merger with Jaguar is excluded) after the first \$36 million of proceeds.

The Company has committed to spend a minimum of \$700,000 on product materials and marketing the first twelve months of its agreement with its distributor ending April 14, 2020 (See Note 5).

Napo has three subsidiary companies (the Subsidiary Companies) in India. These entities have had limited operations for several years, however certain of them have deficit balances. In connection with funding arrangements entered into by an investor in the Subsidiary Companies, the investor may require the Subsidiary Companies to redeem certain assets and distribute the proceeds to the investor. Napo believes that assets subject to redemption have little or no value, however the investor may require redemption for certain administrative or legal purposes. Under Indian law an entity may not make distributions to investors if they are in a net deficit position. While the estimated fair value of the redeemable assets is immaterial, Napo may have to contribute additional funds to the Subsidiary Companies to remove any net deficit in order for the redemption to proceed. Napo estimates that amount of such contribution, if any, to the Subsidiary Companies would be \$250,000 or less (See Note 14).

8. Debt and Warrants

The following is a summary of the debt issued by Napo.

Litigation Debt

In December 2011, Napo entered into a Forward Purchase Agreement(s) ("Agreement") with a third party (the Lender) to provide funding for Napo's litigation activities with Salix Pharmaceuticals, Inc., and, its arbitration with Glenmark Pharmaceuticals Limited. The terms of the Agreement included a guaranteed return on funds advanced, depending upon the amount of time lapsed from the initial funding, in the event Napo was successful in any part of its litigation or arbitration. In October 2014, Napo and the Lender restructured the existing debt under Agreements into a note (the "Financing Agreement") with a principal amount of \$30,000,000 due January 1, 2017 and Napo recognized a gain on the restructuring of the debt. The Financing Agreement accrues interest monthly at 18% per annum, with monthly accrued interest added to principal on the first day of the following month.

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

8. Debt and Warrants (Continued)

From July 2014 to March 2016, a portion of the royalties received by Napo from the Salix Collaboration Agreement were paid into a control account for the benefit of the Lender and such funds were used to reduce the principal on the Financing Agreement. In March 2016, subsequent to the settlement of the litigation with Salix and the return of the licensed assets to Napo, the Lender and Napo entered into an agreement which provided for payments by Napo to the Lender of 10% of net sales of Mytesi® on a quarterly basis.

The Lender has a security interest (the "Security Interest") on all Napo assets, including 2,666,666 shares of Jaguar Animal Health, Inc. owned by Napo. Funds Napo received from its License with Jaguar Animal Health, Inc. were not subject to the Security Interest, however certain amounts of those funds were pledged to the Convertible Note Lenders (See Convertible Notes below). The Financing Agreement requires that any funds Napo receives from sales of assets, recoveries, etc. be used to pay interest or principal on the Financing Agreement.

All principal and interest on the Financing Agreement was due on January 1, 2017. The principal balance owed was \$51,256,639 and \$36,203,421 as of December 31, 2016 and 2015, respectively, inclusive of accrued interest added to principal of \$20,588,503 and \$5,997,784 at December 31, 2016 and December 31, 2015.

Convertible Notes

In March 2011 Napo entered into three convertible notes (the "Convertible Notes") equaling \$1.575 million with an original due date of March 18, 2014 with interest on the outstanding principal amount bearing interest at 20%. The Convertible Notes and underlying principal, interest rates, maturity dates, payment terms, and collateral were amended at various times through January 2016. The first amendment provided that the lenders (the "Lenders") were to receive 100% of the payments made to Napo pursuant to the License Agreement with Jaguar Animal Health, Inc., after the first \$250,000 payment to Napo. The first payment of \$250,000 was made in 2015. The amended maturity date of the Convertible Notes was June 30, 2015.

In October 2015, the Lenders and Napo entered into a further amendment of the Convertible Notes. As part of the amendment, the Lenders agreed to reduce the level of payments made by Napo to 50% of the payments received by Napo from Jaguar Animal Health, Inc. under the License Agreement. The interest on the Convertible Notes was then increased from 12% to 15%, as of April 1, 2015 because Napo had made no interest payments as required beginning on April 1, 2015. All other terms remained the same.

In January 2016, effective as of December 31, 2015, the Lenders and Napo agreed to a reduction of \$100,000 in the payment due to the Lenders as of December 31, 2015 from Napo's License Agreement with Jaguar Animal Health, Inc. and that \$100,000 would be added to the next payment to be made by Napo to the Lenders on March 31, 2016 when Napo received its final payment under the License Agreement.

In connection with the amendments made to the Convertible Notes, the Company has issued warrants to the lenders at various times. As of December 31, 2016 and 2015, the Convertible Note Lenders collectively hold warrants to purchase 1,916,137 shares of common stock.

The Convertible Notes have certain covenants prohibiting investments in new subsidiaries and, restrict the issuance of stock compensation to Napo employees, consultants or others without the

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

8. Debt and Warrants (Continued)

express written consent of Dorsar Investment Company, one of the Lenders and restrict Napo from incurring any debt with superior rights than those of the Lenders, without their consent. The Convertible Notes have a second lien on Napo assets and a pledge of common stock owned by Lisa A. Conte. Napo cannot distribute to its shareholders any shares Napo owns of Jaguar Animal Health, Inc. The principal balance owed was \$1,321,151 and \$1,783,650 as of December 31, 2016 and 2015 respectively. The interest due on the principal balance was \$653,683 and \$442,935 as of December 31, 2016 and 2015, respectively.

Forbearance and December Notes

In the 4th quarter of 2016, Napo informed its lenders that it would be unable to pay the principal and interest on the Financing Agreement on January 1, 2017 as required. In December 2016, Napo and the Financing Agreement Lender, the Convertible Note Lenders and a third party financing source entered into a forbearance agreement which provides that as long as Napo is not deemed to be in default with the covenants of its existing debt, as amended, then its lenders would forbear on exercising certain of their rights and remedies under the loan agreements during the forbearance period, no later than June 30, 2017. The Forbearance Agreement also provided for January 31, 2017 deadlines for entering into certain agreements including a settlement agreement between Napo and the Financing Agreement Lender, a merger agreement between Napo and Jaguar, and a control agreement for the December Note proceeds between Napo, the December Notes lender and the Financing Agreement Lender (See Note 14).

In December 2016, Napo entered into a note purchase agreement which provides for the sale of up to \$12,500,000 face amount of notes and issued convertible promissory note(s) (the December Notes) in the aggregate face amount of \$2,500,000 to three lenders and received proceeds of \$2,000,000 which resulted in \$500,000 of original issue discount. The carrying amount of the December Notes is reduced by \$80,210 on the balance sheet for debt issuance costs. Any subsequent note purchases will be at the sole discretion of the purchaser and will be issued at similar original issue discount as the December Notes.

The December Notes mature on December 30, 2019 and bear interest at 10% with interest due each six-month period after December 30, 2016. Interest on these notes was immaterial for the year ended December 31, 2016. If Napo merges with Jaguar, at the option of Napo, interest may be paid in cash or in the stock of Jaguar, but if Jaguar is not listed on Nasdaq or the OTC bulletin board, then interest must be paid in cash. If Napo merges with Jaguar, then in each one year period beginning December 30, 2016, up to one-third of the principal and accrued interest on the December Notes may be converted into the common stock of the merged entity at a conversion price of \$0.935 per share. The December Notes are secured by a security interest in Napo inventory pursuant to a limited subordination agreement between Napo, the December Note purchasers and the Convertible Note Lenders and the Lender associated with the Financing Agreement. The principal balance owed was \$2,500,000 and \$0 as of December 31, 2016 and 2015, respectively. The interest due on the principal balance was \$1,366 and \$0 as of December 31, 2016 and 2015, respectively.

In December 2016, Napo and the three Convertible Notes holders and certain other creditors reached verbal agreement for the option to convert their debt to Napo common stock upon a merger of Napo and Jaguar at a price later determined to be \$0.935 per share. In December 2016, Napo agreed to decrease the exercise price of the warrants to purchase 6,727,443 shares of Napo common

Table of Contents**Napo Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)****8. Debt and Warrants (Continued)**

stock held by the Convertible Note Lenders and entities related to one of Convertible Note holders to \$0.08 per share, but only in the event Napo consummates a merger with Jaguar. The average exercise price per share of these warrants is currently \$0.31 per share. The number of shares underlying the warrants will decrease pursuant to the proposed merger terms. However, the ultimate number of shares underlying the warrants as well as the lower exercise price of \$0.08 per share is subject to the closing of any acquisition of between Napo and Jaguar (See Note 14).

The following table sets forth current and long term maturities of debt at December 31, 2016 and December 31, 2015.

	2016	2015
Current:		
Financing Agreement	\$ 51,256,639	\$
Convertible Notes	1,321,151	1,783,650
Total current:	52,577,790	1,783,650
Long term debt:		
Financing Agreement		36,203,421
Settlement Liability(1)	2,500,000	2,500,000
Convertible Notes, net	1,919,790	
Total long term:	4,419,790	38,703,421
Total:	\$ 56,997,580	\$ 40,487,071

The following table sets forth scheduled future principal payments as of December 31, 2016:

Amounts Due in Years Ending December 31,	Principal Amount
2017	\$ 52,577,790
2018	
2019	2,500,000
Thereafter(1)	2,500,000
Total:	\$ 57,577,790

(1)

Settlement liability is payable out of royalties received from Glenmark Collaboration Agreement. See Note 5 and Note 12. Napo has received no royalties from the Glenmark Collaboration Agreement and is unable to determine when, if ever, such royalties will be received.

9. Stock Compensation

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

As of December 31, 2015, the Company had two stock compensation plans. The Napo Pharmaceuticals, Inc. 2001 Equity Incentive Plan (the "2001 Plan"), provides for grants of incentive and nonqualified stock options, restricted stock awards, and stock bonuses to its employees, directors and consultants. At December 31, 2015, there were options to purchase 2,086,532 shares outstanding under the 2001 Plan. All outstanding options under the 2001 Plan expired on various dates in 2016. No

F-59

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

9. Stock Compensation (Continued)

further grants have been made under the 2001 Plan since June 2006 and the 2001 Plan has been discontinued.

For the year ended December 31, 2016, Napo's sole stock compensation plan was the Napo Pharmaceuticals, Inc. 2006 Equity Incentive Plan, as amended, (the "2006 Plan") which provides for grants of incentive and nonqualified stock options, restricted stock awards, restricted stock units (RSUs) and stock bonuses to the Company's employees, directors and consultants. Under the 2006 Plan the total number of shares reserved and available for grant is 14,673,650. Under the 2006 Plan, incentive and nonqualified stock options may be granted at a price per share not less than the fair market value at the date of grant. If, at the time an option is granted, the optionee owns stock possessing more than 10 per cent of the total combined voting power of all classes of stock of the Company, the option price shall be 110 per cent of the fair market value of the shares of the date of grant. Options granted generally have a maximum term of ten years from the grant date and become exercisable over two to three years.

Napo has not recognized any stock compensation for the years ended December 31, 2016 and 2015. All grants of options to purchase common stock vested prior to January 1, 2015. Substantially all such stock options expire in November 2017. Grants of restricted stock units are subject to a number of vesting criteria, in addition to service and those criteria have not been met and may never be met.

At December 31, 2016 and December 31, 2015 there were options to purchase 2,984,000 and 3,284,000 shares, respectively, at exercise prices of \$0.10 to \$0.37 per share outstanding under the 2006 Plan and restricted stock units (RSUs) issued, subject to certain restrictions, representing 11,669,832 shares, for a total of 14,673,650 shares issuable under the 2006 Plan.

Overview of Restricted Stock Units

RSU's issued from 2008-2010

All of the grantees of 12,458,908 RSU's issued between 2008 and 2010 have vested in the service component of the RSU's, however, the common stock underlying the RSU's is not issuable until such time as a liquidity event occurs such as an IPO or a change of control transaction as defined in the 2006 Plan. The RSU's expire on December 31, 2018.

RSU's issued between 2011 and 2013

Grantees who received the 12,784,165 RSU's issued between 2011 and 2013 have vested in the service component of the RSU's as of the end of the year in which the grants were made, however, there are other restrictions on receiving the underlying shares including the repayment of existing convertible debt which had a principal balance of approximately \$1,783,650 at December 31, 2015 and \$1,321,150 at December 31, 2016, including the successful resolution of the litigation with Salix Pharmaceuticals, Inc. which as of March 2016 has been satisfied. Grantees may not receive the shares underlying the RSU's until such time as there is an either a liquidity event such as an IPO or a change of control transaction, as defined in the 2006 Plan. All RSU's expire on December 31, 2018, however if the merger of Napo with Jaguar (See Note 14) is consummated then the expiration of the RSU's will be extended pursuant to the terms of the merger agreement.

Current and former officers and directors of Napo have agreed to place their restricted stock units in a pool as collateral for any indemnification claims regarding Napo's representations and warranties

Table of Contents**Napo Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)****9. Stock Compensation (Continued)**

contained in the merger agreement, for a period of twelve months following the closing of the acquisition (See Note 14).

Between 2008 and 2011, the Company granted 14,447,006 RSU grants not covered by a stock compensation plan. In December 2016, the Board of Directors approved RSU grants of 5,110,989 and in April 2016, another grant of RSUs totaling 2,767,039 shares was approved with 6,254,263 of these RSU grants outside of a stock compensation plan, for a total of 20,701,269 RSU grants outside a stock compensation plan. These grants expire December 31, 2018. Management has determined that the fair value of the RSUs granted in 2016 and 2015 was de minimis.

A summary of the Company's outstanding stock option and RSUs as of December 31, 2016 and December 31, 2015 is below:

Stock Compensation	2016	2015
<i>2001 Plan</i>		
Stock options		2,086,532
<i>2006 Plan</i>		
Stock Options	2,984,000	3,284,000
RSU's	11,669,832	10,946,832
<i>RSU's granted outside Plan(s)</i>		
RSU's	20,701,269	18,657,229
 Total Stock Compensation	 35,355,101	 34,974,593

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

9. Stock Compensation (Continued)

Stock Options and Restricted Stock Units

The following table summarizes incentive plan activity for the years ended December 31, 2016 and 2015:

	Shares Available for Grant	Stock Options Outstanding	RSUs Outstanding	Weighted Average Stock Option Exercise Price
2001 Equity Incentive Plan Balance December 31, 2014		2,320,913		\$ 0.27
Additional shares authorized				
Options Granted				
Options Cancelled		(234,281)		\$ 0.085
RSUs Granted				
RSUs Cancelled				
2006 Equity Incentive Plan Balance December 31, 2015		2,086,532		\$ 0.29
Additional shares authorized				
Options Granted				
Options Cancelled		(2,086,532)		\$ 0.29
Options Exercised				
RSUs Granted				
RSUs Cancelled				
2006 Equity Incentive Plan Balance December 31, 2016				
2006 Equity Incentive Plan Balance December 31, 2014		3,284,000	10,046,067	\$ 0.38
Additional shares authorized				
Options Granted				
Options Cancelled				
RSUs Granted			900,765	
RSUs Cancelled				
2006 Equity Incentive Plan Balance December 31, 2015		3,284,000	10,946,832	\$ 0.38
Additional shares authorized				
Options Granted				
Options Cancelled		(300,000)		\$ 0.38
Options Exercised				
RSUs Granted			723,000	
RSUs Cancelled				
2006 Equity Incentive Plan Balance December 31, 2016		2,984,000	11,669,832	\$ 0.38
Combined Incentive Plan Balance December 31, 2016		2,984,000	11,669,832	\$ 0.38
Options vested and exercisable December 31, 2016		2,984,000		\$ 0.38

RSU's vested and expected to issue December 31, 2016

F-62

Table of Contents**Napo Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)****10. Stockholders' Equity****Common Stock**

Napo's fourth amended and restated certificate of incorporation authorizes Napo to issue 175,000,000 shares of common stock \$0.0001 par value. The holders of common stock are entitled to one vote for each share of common stock held at all meetings of stockholders. The number of authorized shares of common stock may be increased or decreased by the affirmative vote of the holders of shares of capital stock of the Napo representing a majority of the votes represented by all shares entitled to vote.

As of December 31, 2016 and 2015, Napo had reserved shares of common stock for issuance as follows:

	2016	2015
Options issued and outstanding	2,984,000	5,370,532
Options available for grant		
RSUs issued and outstanding	32,371,101	29,604,062
Warrants issued and outstanding	6,727,443	6,727,443
Total	42,082,544	41,702,037

The following table illustrates the exercise price and expiration date of warrants issued to purchase Napo common stock.

Shares underlying warrants to purchase Napo common stock	Exercise price	Expiration Date
411,047	\$ 0.200000	December 31, 2018
387,849	\$ 0.550000	December 31, 2018
3,361,080	\$ 0.194163	December 31, 2025
688,953	\$ 0.200000	December 31, 2025
1,155,560	\$ 0.550000	December 31, 2025
722,954	\$ 0.553280	December 31, 2025
Total	6,727,443	

11. Related Party Transactions

Napo owns 2,666,666 shares or 19% and 33% of Jaguar at December 31, 2016 and December 31, 2015, respectively. Napo consolidated the operations of Jaguar in its 2015 financial statements up to the time of Jaguar's initial public offering in May 2015. During 2016, Napo transferred \$174,299 of active pharmaceutical ingredient and \$37,354 of Mytesi® to Jaguar.

During the year ended December 31, 2016, Napo was provided certain services by Jaguar. For 2016, Napo recorded \$628,867 for such services and \$299,648 was owed to Jaguar at December 31, 2016 (See Note 4).

Napo licensed rights to Jaguar for crofelemer for animal indications in January 2014, as amended in August 2014 and January 2015, in exchange for a license fee and royalties. Napo and Jaguar

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

11. Related Party Transactions (Continued)

currently have an Employee Leasing and Overhead Allocation Agreement between the two companies and have signed a Binding Agreement for the Acquisition of Napo Pharmaceuticals, Inc. (See Notes 1, 4, 5 and 14).

12. Litigation Settlements

Salix

In May 2011, the Company sued Salix in the New York County Supreme Court of the State of New York with regard to Salix's performance under the Salix Collaboration Agreement. The litigation ultimately went to trial in February 2014 and the jury found for the defendant, Salix. The Company filed an appeal of the litigation. On March 4, 2016, Napo and Salix entered into a Settlement, Termination, Asset Transfer and Transition Agreement the "Asset Transfer Agreement". The Asset Transfer Agreement settled the litigation between the companies and terminated the Salix Collaboration Agreement. In addition, all rights to crofelemer previously licensed to Salix, including with respect to the FDA approved drug, Mytesi®, were transferred to Napo, along with certain regulatory and other documentation. Napo received inventories of Mytesi® drug product, active pharmaceutical ingredient and crude plant latex (CPL) used in the manufacture of Mytesi®, as well as 490 hectares of land in Peru for which it recognized a gain on settlement of \$1,888,319. In addition, certain existing inventory of CPL is expected to be transferred to Napo in 2017. The Asset Transfer Agreement also provides that Salix (now owned by Valeant Pharmaceuticals International) will receive a portion of the proceeds of any sale of the Company (an acquisition of Napo by Jaguar, that meets the conditions as defined in the Asset Transfer Agreement is excluded) or a portion of any payments made by the Company's licensees, sublicensees or partners of the reverted crofelemer rights or other transferred assets in the former Salix territories, in each case after the deduction of a fixed amount.

Glenmark

In December 2013, Napo and Glenmark Pharmaceuticals Limited settled an arbitration proceeding between the parties (the Settlement Agreement). In the Settlement Agreement, amongst other things, with respect to Glenmark's unresolved claim for legal fees and costs in the arbitration proceeding, Glenmark and Napo agreed that Napo will make payment to Glenmark in the amount of \$2,500,000 in full satisfaction of Glenmark's claim for legal fees and costs in the arbitration. The full payment will be deferred and offset against future royalty payments due under Article 5 of the Glenmark Collaboration Agreement which addresses royalty payments to Napo, with 50% of each royalty payment due to Napo under Article 5 being paid and the other 50% being offset against the amount Napo has agreed to pay for legal fees and costs, until the full \$2,500,000 offset. As of December 31, 2016, has received no royalty payments from Glenmark and therefore Napo has made no payments toward the \$2,500,000.

13. Income Taxes

The Company had net loss of \$20.4 million and net income of \$5.3 million for the years ended December 31, 2016 and 2015, respectively.

Due to continued losses, and a full valuation allowance, the Company has not recorded a provision for income taxes for the years ended December 31, 2016 and 2015.

Table of Contents**Napo Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)****13. Income Taxes (Continued)**

The Company's effective tax during the years ended December 31, 2016 and 2015, differed from the federal statutory rate primarily as a result of the valuation allowance.

Net deferred tax assets as of December 31, 2016 and 2015 consist of the following:

	2016		2015
Non-current Deferred Tax Assets:			
Net Operating Losses	\$ 33,867,958	\$	37,375,890
Tax Credits	1,805,927		1,290,964
Investments	(665,035)		(2,290,278)
Other	1,176,169		1,685,825
	36,185,019		38,062,401
Valuation Allowance	(36,185,019)		(38,062,401)
Net Non-current Deferred Tax Assets	\$		\$

A valuation allowance is provided when it is more likely than not that the deferred tax assets will not be realized. The Company has established a valuation allowance to offset net deferred tax assets as of December 31, 2016 and 2015, due to the uncertainty of realizing future tax benefits from its net operating loss carryforwards and other deferred tax assets.

The valuation allowance decreased by approximately \$1.9 million during the year ended December 31, 2016 and increased by \$2.6 million in the year ended December 31, 2015.

As of December 31, 2016, the Company had federal and California net operating loss carryovers of approximately \$85.4 million and \$83.1 million, respectively. The federal and California net operating losses will begin to expire in 2033.

As of December 31, 2016, the Company had federal and California research credit carryovers of approximately \$1.3 million and \$0.8 million, respectively. The federal research credits will begin to expire in 2033. The California research credits carry forward indefinitely.

The Tax Reform Act of 1986 limits the use of net operating loss and tax credit carryforward in certain situations where changes occur in the stock ownership of a company. Due to the Company's cumulative loss position, the Company has not determined whether an ownership change has occurred under these provisions. In the event the Company has had a change in ownership, as defined by the tax law, utilization of the carryforwards could be limited.

14. Subsequent Events

The Company completed an evaluation of the impact of subsequent events through March 24, 2017, the date these financial statements were issued.

Binding Agreement for the Acquisition of Napo Pharmaceuticals, Inc.

In February 2017, the Boards of Directors of Napo Pharmaceuticals and Jaguar Animal Health, Inc. approved a Binding Agreement for the Acquisition of Napo Pharmaceuticals, Inc. Jaguar will be the surviving entity along with its board of directors and officers. Shares of Jaguar common stock issued to Napo creditors, warrant holders and others will equal approximately 75% of the diluted

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

14. Subsequent Events (Continued)

shares, subject to certain adjustments, of Jaguar after the merger. The agreement calls for a breakup fee of 2,000,000 restricted common shares of Jaguar if the Merger fails to Close for any reason on, or prior to, July 31, 2017, other than as a result directly or indirectly of (x) lack of stockholder approval by either Party or (y) Napo (i) fails to perform in accordance with the terms and conditions of this Binding Agreement of Terms or the Merger Documents or (ii) fails to abide by or breaches the provisions or representations, warranties and covenants of this Binding Agreement of Terms or the Merger Documents, then on, or before, the close of business on August 7, 2017, Jaguar shall issue 2,000,000 shares of its restricted Common Stock to Napo (adjusted appropriately for stock splits, combinations, reclassifications and the like) (the "Break-Up Fee"). The closing of the merger, in addition to shareholder approval is subject to standard legal and financial due diligence.

March Notes

On March 1, 2017, Napo entered into a convertible note purchase agreement with two lenders for the funding of \$1,050,000 (face amount of \$1,312,500) in two \$525,000 tranches (face amount \$656,250). The notes bear interest at 3% and mature on December 1, 2017. Interest may be paid at maturity in either cash or shares of Jaguar, provided that if Jaguar is not listed on Nasdaq or the Bulletin Board or registered under the Securities Act then interest must be paid in cash. Assuming the funding of \$1,050,000, the notes may be exchanged for up to 2,343,752 shares of Jaguar common stock, prior to maturity date assuming that either the merger of Napo and Jaguar has occurred, among other conditions. Napo received funding of \$525,000 on March 1, 2017, and recorded \$106,250 of original issue discount and \$25,000 of debt issuance costs

Second, Third and Fourth Amendments to Forbearance Agreement

As of January 31, 2017, and February 28, 2017 the Financing Agreement lender, the December Note lenders and the Company entered into the Second and Third Amendments to the Forbearance Agreement. The Second Amendment extended the deadline to February 28, 2017 for entering into certain agreements including a settlement agreement between Napo and the Litigation Note lender, a merger agreement between Napo and Jaguar, and a control agreement between Napo, the December Notes lender and the Litigation Note Lender. The Third Amendment further extended the February 28, 2017 date to March 15, 2017. Such agreements were executed on or before March 15, 2017. The Fourth Amendment, currently being executed, will extend this date to March 31, 2017.

The Second Amendment to the Forbearance Agreement also amended the terms of the Financing Agreement to allow for unsecured indebtedness in an aggregate original principal amount of \$625,000, convertible into shares of common stock of Jaguar flowing the merger of Napo and Jaguar of \$0.56 per share.

First, Second and Third Amendments to the December Note Purchase Agreement

The First Amendment to the December Note Purchase Agreement extended the deadline for the execution of a control agreement for the December Note proceeds to February 28, 2017 which was further extended in the Third Amendment to March 31, 2017.

The First Amendment also provided for unsecured indebtedness in an aggregate original principal amount of \$625,000, convertible into shares of common stock of Jaguar flowing the merger of Napo and Jaguar of \$0.56 per share.

Table of Contents

Napo Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

14. Subsequent Events (Continued)

The Second Amendment to the December Note Purchase Agreement also provided for certain restrictions on Napo entering into any business arrangements or other ventures except with Jaguar, and provided for disposition of the breakup fee mentioned in the Binding Agreement above. The Second Amendment also provided for an increased level of funding. See March Notes above.

Second Amendment to Marketing and Distribution Agreement between Napo and BexR

As of February 27, 2017, Napo and BexR entered into a Second Amendment of the Marketing and Distribution Agreement dated April 16, 2017. The Second Amendment Amended the terms of the repayment of the \$250,000 marketing advance BexR made to Napo in June 2016. Napo will now repay the advance beginning in July 2017 over seven months ending in January 2018, with a total repayment amount of \$267,500.

On March 16, 2017, Napo received a communication from the investor in the Subsidiary Companies that it intended to exercise its redemption right (See Note 7).

15. Additional Subsequent Events

The Company completed an evaluation of the impact of subsequent events through April 18, 2017, the date these financial statements were available to be re-issued.

Definitive Merger Agreement

Napo and Jaguar entered into a Definitive Merger Agreement (the "Merger Agreement") on March 31, 2017. The Merger Agreement contains certain conditions to closing, including limitations on outstanding debt and a minimum cash balance requirement.

In connection with the Merger Agreement Napo entered into settlement agreements on March 31, 2017 with its creditors, lenders and the holders of its warrants and RSUs (collectively the "Settlement Agreements"). The Settlement Agreements provide for the issuance of cash and Jaguar shares and warrants to the creditors, lenders and warrant holders in settlement of their claims.

AGREEMENT AND PLAN OF MERGER

This AGREEMENT AND PLAN OF MERGER (this "*Agreement*") is made and entered into as of March 31, 2017, by and among Jaguar Animal Health, Inc., a Delaware corporation ("*Parent*"), Napo Acquisition Corporation, a Delaware corporation ("*Merger Sub*"), Napo Pharmaceuticals, Inc., a Delaware corporation ("*Company*"), and Gregory Stock, the Company Representative. Certain capitalized terms that are used in this Agreement are defined in *Article IX*. *Appendix I* provides an index to certain capitalized terms that are defined in other provisions of this Agreement.

RECITALS:

A. Upon the terms and subject to the conditions set forth in this Agreement and in accordance with the Delaware General Corporation Law (the "*DGCL*"), Parent, Merger Sub and Company intend to enter into a business combination transaction.

B. The Board of Directors of Parent and of Merger Sub have: (i) determined that the Merger (as defined below) and the other transactions contemplated hereby, including the Debt Exchange (as defined below) pursuant to the Settlement Agreements, and the transactions contemplated under the Note Purchase Agreements and the Invesco Commitment Letter (all of the foregoing collectively, the "*Transactions*") are in the best interests of each such Person and its stockholders; (ii) unanimously approved this Agreement, the Merger and the Transactions; (iii) recommended that the stockholders of Parent adopt and approve this Agreement, the Merger and the Transactions and (iv) solely with respect to the Board of Directors of Parent, determined that Parent, as the sole stockholder of Merger Sub, approve this Agreement, the Merger and the Transactions.

C. The Board of Directors of Company has: (i) determined that the Merger and the Transactions are fair to and in the best interests of Company and its stockholders; (ii) unanimously approved this Agreement, the Merger and the Transactions; and (iii) recommended that the stockholders of Company adopt and approve this Agreement, the Merger and the Transactions.

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants, promises and representations set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and accepted, the parties hereto hereby agree as follows:

ARTICLE I THE MERGER AND EFFECT ON CAPITAL STOCK

1.1 *The Merger.* At the Effective Time (as defined below) and subject to and upon the terms and conditions of this Agreement and the applicable provisions of the DGCL, Merger Sub shall be merged with and into Company (the "*Merger*"), the separate corporate existence of Merger Sub shall cease and Company shall continue as the surviving corporation in the Merger. Company, as the surviving corporation in the Merger, is hereinafter sometimes referred to as the "*Surviving Corporation*." As a result of the Merger, the outstanding shares of capital stock of each of Company and Merger Sub shall be converted or cancelled in the manner provided herein. Prior to the Closing (as defined below), Parent shall prepare and, on the Closing Date (as defined below), the Company, Parent and Merger Sub shall (i) cause a certificate of merger with respect to the Merger (the "*Certificate of Merger*") to be duly executed and filed with the Delaware Secretary of State as provided under the DGCL and (ii) make any other filings, recordings or publications required to be made by the Company or Merger Sub under the DGCL in connection with the Merger. The Merger shall become effective at such time as the Certificate of Merger shall have been duly filed with the Delaware Secretary of State on the Closing Date or on such other date and time (not to exceed thirty (30) days from the date that the Certificate of Merger is duly filed with the Delaware Secretary of State) as shall be agreed to by the Company and Parent and specified in the Certificate of Merger (the date and time the Merger becomes effective being the "*Effective Time*").

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

1.2 *Closing.* The closing of the Merger (the "*Closing*") shall occur at 11:59 p.m. (Pacific Standard Time), on the third (3rd) Business Day after all of the conditions set forth in *Article VIII* (other than those conditions that by their terms are required to be satisfied or waived at the Closing, but subject to the satisfaction or waiver of such conditions) shall have been satisfied or waived by the party entitled to the benefit of the same or at such other time and date as shall be agreed upon by the parties hereto. The date on which the Closing occurs is referred to in this Agreement as the "*Closing Date*". The Closing shall take place at the offices of Reed Smith LLP, 1510 Page Mill Road, Suite 110, Palo Alto, CA 94304 or at such other place as agreed to in writing by the parties hereto.

1.3 *Effect of the Merger.* At the Effective Time, the effect of the Merger shall be as provided in this Agreement and the applicable provisions of the DGCL.

1.4 *Certificate of Incorporation; Bylaws.* At the Effective Time, the Certificate of Incorporation of Merger Sub shall be the certificate of incorporation of the Surviving Corporation, and the Bylaws of Merger Sub shall be the Bylaws of the Surviving Corporation.

1.5 *Directors and Officers.*

(a) *Directors.* At the Effective Time,

(i) the Board of Directors of the Surviving Corporation shall consist of seven (7) directors, who will initially be the persons who are the Parent Board Members; and

(ii) the Board of Directors of Parent will initially consist of seven (7) directors, who will be the following individuals: Lisa A. Conte, James Bochnowski, Folkert W. Kamphuis, John Micek III, Ari Azhir, Jiahan Qui and Zhi Yang (such persons are collectively referred to as the "*Parent Board Members*"). Each such director shall hold office, subject to the applicable provisions of the Parent Charter and Parent Bylaws, until their respective successors shall have been elected and qualified or until otherwise provided by Law.

(b) *Officers of the Surviving Corporation.* At the Effective Time, the officers of the Surviving Corporation shall consist of the following:

(i) Interim CEO and Secretary: Lisa A. Conte.

(ii) CFO and Treasurer: Karen Wright.

1.6 *Closing Deliverables.*

(a) *Closing Deliverables by Company.* Company agrees to deliver to (or cause to be delivered to) Parent at the Closing on the Closing Date the following agreements and documents, all reasonably satisfactory in form and substance to Parent and its legal counsel:

(i) all corporate minute and stock books, stock ledgers and corporate seals of Company;

(ii) written resignations of all officers and members of the Board of Directors of Company who will not be officers or directors of the Surviving Corporation upon the closing pursuant to this Agreement;

(iii) a certificate of an officer of Company in a form approved in advance by Parent, dated the Closing Date, certifying that attached thereto is (A) a true, correct and complete certified copy of the Certificate of Incorporation of Company and all amendments and/or restatements thereof (collectively, the "*Company Charter*"), (B) a true, correct and complete copy of the Bylaws of Company and all amendments and/or restatements thereof (collectively, the "*Company Bylaws*"), (C) a true, correct and complete copy of any resolutions adopted by the Board of Directors and stockholders of Company relating to this Agreement or the Transactions, and (D) a recent good standing certificate of Company issued by the Secretary of State of Delaware;

Table of Contents

(iv) a certificate, signed by the Company's chief executive officer or other senior officer on behalf of the Company, dated the Closing Date, in a form approved in advance by Parent, certifying to the effect that the conditions set forth in *Section 8.2(a)* and *Section 8.2(b)* of this Agreement have been satisfied;

(v) a fully executed copy of each of the Settlement Agreements;

(vi) a fully executed copy of the RSU Agreement of each RSU Indemnitee; and

(vii) such other documents and instruments as may be reasonably required to effectuate the terms of this Agreement and to comply with the terms hereof.

(b) *Closing Deliverables by Parent.* Parent agrees to deliver to (or cause to be delivered to) Company at the Closing on the Closing Date the following agreements and documents, all reasonably satisfactory in form and substance to Company and its legal counsel:

(i) written resignations of all members of the Board of Directors of Parent who will not be directors of Parent upon the Closing pursuant to this Agreement;

(ii) a certificate of an officer of Parent in a form approved in advance by Company, dated the Closing Date, certifying that attached thereto is (A) a true, correct and complete certified copy of the Certificate of Incorporation of Parent and all amendments and/or restatements thereof (collectively, the "*Parent Charter*"), (B) a true, correct and complete copy of the Bylaws of Parent and all amendments and/or restatements thereof (collectively, the "*Parent Bylaws*"), (C) a true, correct and complete copy of any resolutions adopted by the Board of Directors of Parent relating to this Agreement or the Transactions, and (D) a recent good standing certificate of Parent issued by the Secretary of State of Delaware;

(iii) a certificate of an officer of Merger Sub in a form approved in advance by Company, dated the Closing Date, certifying that attached thereto is (A) a true, correct and complete certified copy of the Certificate of Incorporation of Merger Sub, (B) a true, correct and complete copy of the Bylaws of Merger Sub, and (C) a true, correct and complete copy of any resolutions adopted by the Board of Directors relating to this Agreement or the Transactions;

(iv) a certificate, signed by Parent's chief executive officer or other senior officer on behalf of Parent, dated the Closing Date, in a form approved in advance by the Company, certifying to the effect that the conditions set forth in *Section 8.3(a)* and *Section 8.3(b)* of this Agreement have been satisfied.

(v) a fully executed copy of the Investor Rights Agreement;

(vi) a fully executed copy of the Escrow Agreement;

(vii) a fully executed copy of the letter agreement in the form attached as Schedule 4.8(c) of the Salix/Napo Settlement Agreement; and

(viii) such other documents and instruments as may be reasonably required to effectuate the terms of this Agreement and to comply with the terms hereof.

1.7 *Dissenting Shares.*

(a) Notwithstanding anything in this Agreement to the contrary, any shares of Company Common Stock (as defined herein)(to the extent that appraisal rights are required under the DGCL) held by a holder who has not voted in favor of the Merger or consented thereto in writing and who has exercised and perfected appraisal rights for such shares in accordance with the DGCL and has not effectively withdrawn or lost (through failure to perfect or otherwise) such holder's appraisal rights (collectively, the "*Dissenting Shares*") shall not be converted into or represent the right to receive consideration for such shares of Company Common Stock set forth in

Table of Contents

Section 2.1(a) below, and the holder or holders of such shares shall be entitled only to such rights as may be granted to such holder or holders under Section 262 of the DGCL.

(b) Notwithstanding the provisions of this Section 1.7, if any holder of Dissenting Shares shall effectively withdraw or lose (through failure to perfect or otherwise) such holder's appraisal rights under the DGCL, then, as of the later of the Effective Time and the occurrence of such event, such holder's shares shall be canceled and extinguished and automatically be converted into and represent only the right to receive the consideration for Company Common Stock set forth in Section 2.1(a) below, without interest.

(c) Persons who have perfected statutory rights with respect to Dissenting Shares in accordance with the DGCL will have only such rights as are provided by Section 262 of the DGCL with respect to such Dissenting Shares. The Company shall give Parent (i) prompt notice of any written demand for appraisal received by the Company pursuant to Section 262 of the DGCL and (ii) the opportunity to participate in all negotiations and proceedings with respect to any such demands. The Company shall not make any payment or settlement offer, or approve any withdrawal, prior to the Effective Time with respect to any such demand unless Parent shall have consented in writing to such payment or settlement offer or withdrawal.

ARTICLE II
EFFECT ON CAPITAL STOCK / AND OUTSTANDING DEBT

2.1 *Effect on Capital Stock.* Subject to the terms and conditions set forth in this Agreement, at the Effective Time, by virtue of the Merger and without any action on the part of the parties hereto or the holders of any of the following securities, the following shall occur:

(a) *Conversion of Company Common Stock.* At the Effective Time, each share of common stock, par value \$0.0001 per share, of Company ("*Company Common Stock*"), issued and outstanding immediately prior to the Effective Time, shall be automatically converted solely into a contingent right to receive the number of shares of common stock of Parent, par value \$0.0001 per share ("*Parent Common Stock*") set forth on *Schedule 1* attached hereto (the "*Contingent Right*").

(b) *Stock Options.* At the Effective Time, all warrants, Company Options and RSUs to purchase or own Company Common Stock then outstanding shall be treated as set forth in *Section 5.2* and allocated as set forth on *Schedule 2*.

(c) *Fractional Shares.* No fraction of a share of Parent Common Stock shall be issued by virtue of the Merger. In calculating the number of whole shares to be issued to each holder of a Contingent Right (a "*Contingent Right Holder*") pursuant to *Section 2.2(a)*, after aggregating all fractional shares of Parent Common Stock that otherwise such Contingent Right Holder would be entitled to be issued, if any, the number of shares of Parent Common Stock to be issued to such Contingent Right Holder, if any, shall be rounded down to the next lower whole number of shares of Parent Common Stock.

(d) *Conversion of Merger Sub Common Stock.* At the Effective Time, each share of common stock, par value \$0.0001 per share, of Merger Sub issued and outstanding immediately prior to the Effective Time, shall be converted into and exchanged for one validly issued, fully paid and nonassessable share of common stock, par value \$0.0001 per share, of the Surviving Corporation. Each stock certificate of Merger Sub evidencing ownership of any such shares shall, as of the Effective Time, evidence ownership of such shares of common stock of the Surviving Corporation.

2.2 *Debt Exchange.* At the Effective Time, subject to the terms and conditions of each of the Settlement Agreements, Parent will issue to each existing creditor of the Company listed on *Schedule 3* the class and number of shares of stock of Parent set forth opposite such creditor's name on *Schedule 3* in full satisfaction, after giving effect to the transactions contemplated by the Investor Rights Agreement and the Settlement Agreements, of all existing indebtedness then owed by the Company to such creditor (the "*Debt Exchange*").

Table of Contents

2.3 *New Issuances.* At the Effective Time, subject to the terms and conditions of the Note Purchase Agreements and the Invesco Commitment Letter, Parent will issue to each of the Persons listed on **Schedule 4** the class and number of shares of stock of Parent set forth opposite such Person's name on **Schedule 4**.

2.4 *Aggregate Number of Shares to be Issued to Company Stakeholders.* The maximum aggregate number of shares of Parent Common Stock and Parent convertible non-voting common stock to be issued or issuable by Parent to the Company Stakeholders pursuant to the Merger and the Transactions is 69,299,346 (the "*Maximum Number of Shares*").

2.5 *Exchange of Certificates.*

(a) *Exchange Procedures.*

(i) At or before the Effective Time, Company will deliver to Parent a true, complete and accurate listing of each holder of record of outstanding shares of Company Common Stock on the Record Date whose shares are to be converted pursuant to this Agreement (each, a "*Company Stockholder*," and collectively, the "*Company Stockholders*"), including the number of shares of Company's Common Stock held by such record holder, the maximum number of shares of Parent Common Stock such holder may be entitled to receive pursuant to **Schedule 1** and any other information reasonably requested by Parent (the "*Company Stock Record*").

(ii) *Certificates.* If, on the Final Determination Date, the final number of Merger Shares (as defined on *Schedule 1*) that will be issued to the Contingent Right Holders pursuant to this Agreement is greater than zero, then within sixty (60) days after the Final Determination Date (the "*Contingent Right Holders Notice Date*"), Parent, or its designee (collectively, the "*Exchange Agent*"), shall mail to each Contingent Right Holder:

(A) a letter of transmittal (which shall specify that delivery shall be effected, and risk of loss and title to the Merger Shares shall pass, only upon delivery of the Company certificates representing the right to such Merger Shares (the "*Certificates*") to the Exchange Agent and shall be in such form and have such other provisions as Parent may specify); and

(B) instructions for use in effecting the surrender of a Certificate in exchange for the Merger Shares.

(iii) *Delivery of Merger Shares.* Upon surrender of a Certificate for cancellation to the Exchange Agent, together with such letter of transmittal duly executed and completed in accordance with its terms and such other documents and/or payments of withholding taxes as set forth in *Section 2.5(d)* as may be reasonably required by the Exchange Agent or Parent, (A) the holder of such Contingent Right shall be entitled to receive in exchange for its Certificate(s), and Parent shall cause the Exchange Agent to deliver, as promptly as practicable thereafter, that number of whole shares of Merger Shares that such holder has the right to receive pursuant to the provisions of this Article II and **Schedule 1** and (B) the Certificate(s) so surrendered shall be canceled.

(b) *No Further Ownership Rights in Company Common Stock.* At the Effective Time, (a) all shares of Company Common Stock outstanding immediately prior to the Effective Time shall be treated in accordance with this Article II and **Schedule 1** and all holders of certificates representing shares of Company Common Stock that were outstanding immediately prior to the Effective Time shall cease to have any rights as stockholders of Company, and (b) the stock transfer books of Company shall be closed and there shall be no further registration of transfers on the stock transfer books of the Surviving Corporation of the shares of Company Common Stock which were outstanding immediately prior to the Effective Time. At no time shall a Contingent Right Holder's

Table of Contents

Contingent Right or rights under this Agreement or in respect of its ownership of Company Common Stock prior to the Effective Time be transferable or any rights hereunder or thereunder assigned by any Contingent Right Holder. Unless and until a Contingent Right Holder's Contingent Right vests in accordance with, and subject to the conditions of, *Schedule 1* and such Contingent Right Holder has delivered its Certificate(s) to the Exchange Agent in accordance with this Article II, such Contingent Right Holder shall have no rights as a stockholder of Parent. If, after the Effective Time, Company Common Stock shares are presented to the Exchange Agent or Parent for any reason, they shall be cancelled and subject to exchange only as provided in this Article II and *Schedule 1*.

(c) *Termination.* A Contingent Right Holder who has not theretofore surrendered its Certificate(s) in accordance with this Article II for a period of one year after the Contingent Right Holders Notice Date shall thereafter look only to Parent (subject to abandoned property, escheat and other similar Laws) as a general creditor for payment of its claim for Merger Shares and any dividends or distributions with respect to such Merger Shares. Parent shall be not liable to any holder of Certificates for Merger Shares (or dividends or distributions with respect thereto) or cash delivered to a public official pursuant to any applicable abandoned property, escheat or similar Law.

(d) *Withholding Rights and Obligations.* Each of the Exchange Agent, the Surviving Corporation and Parent shall be entitled to either (i) deduct and withhold from the consideration otherwise payable pursuant to this Agreement to any holder of shares of Company Common Stock, such number of Merger Shares with a value equal to the amount that the Surviving Corporation or Parent, as applicable, is required to deduct and withhold pursuant to the applicable rules under the Code, or any provision of state, local or foreign Tax Law, or (ii) require as a condition to the delivery of such holder's Merger Shares that such holder deliver to Parent an amount of cash equal to Parent's withholding obligation with respect to the Merger Shares. To the extent that amounts are so withheld as so contemplated, such withheld amounts shall be treated for all purposes of this Agreement as having been paid to the Person to whom such amounts would otherwise have been paid.

(e) *Lost, Stolen or Destroyed Certificates.* In the event any Certificates shall have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the Person claiming such Certificate(s) to be lost, stolen or destroyed and, if required by the Surviving Corporation or Parent or Exchange Agent, the posting by such Person of a bond in such sum as the Parent or its stock transfer agent may reasonably direct as indemnity against any claim that may be made against it with respect to such Certificate(s) after the Final Determination Date, the Exchange Agent will issue the number of Merger Shares deliverable in respect of the shares of Company Common Stock, if any, pursuant to *Section 2.5(a)*, represented by such lost, stolen or destroyed Certificates.

2.6 *Company Representative.* Company hereby designates Gregory Stock to represent the interests of the RSU Indemnitors for the purposes of: (i) after the Closing, giving, receiving and forwarding notices and communications pursuant to this Agreement, (ii) taking any actions relating to claims to indemnify, hold harmless or reimburse any indemnified party pursuant to this Agreement, (iii) after the Closing, giving or agreeing to, on behalf of the Company Stockholders, any and all consents, waivers, amendments, or modifications deemed by the Company Representative, in his discretion, to be necessary or appropriate under this Agreement and the execution or delivery of any documents that may be necessary or appropriate in connection therewith, (iv) taking all other actions contemplated for the Company Representative in this Agreement, (v) after the Closing, receiving payments under or pursuant to this Agreement, and (vi) engaging or appointing any agents (including attorneys, accountants and consultants) to assist the Company Representative in complying with the Company Representative's duties and obligations pursuant to this Agreement (such designee and any

Table of Contents

successor, the "*Company Representative*"). If such Person ceases to serve in such capacity, for any reason, those members of the Board of Directors of Company who were directors of the Company prior to the Closing shall appoint as a successor a Person who was a former stockholder or director of Company or such other Person as such members shall designate. Parent shall be entitled to deal exclusively with the Company Representative on all matters relating to *Article VI* and *Article VII* of this Agreement and shall be entitled to rely conclusively (without further evidence of any kind whatsoever) on any document executed or purported to be executed on behalf of any Contingent Right Holder or by the Company Representative, and on any other action taken or purported to be taken on behalf of any Contingent Right Holder or by the Company Representative, as being fully binding upon such Person. Any decision or action by the Company Representative with respect to those matters as to which the Company Representative has authority hereunder, shall constitute a decision or action of all Contingent Right Holders with respect to such matter and shall be final, binding and conclusive upon each such Person. No Contingent Right Holder shall have the right to object to, dissent from, protest or otherwise contest the same. The provisions of this *Section 2.5* are independent and severable, are irrevocable and coupled with an interest, and shall not be terminated by any act of any one or more stockholders of the Company, or by operation of Law, whether by death or other event.

2.7 Tax Consequences. The parties acknowledge and agree that the Merger will not qualify as a tax-free reorganization within the meaning of Section 368 of the Code, and that the Company Stockholders will not recognize any taxable gain or loss until the Contingent Right Holders Notice Date when the Exchange Agent notifies the Contingent Right Holders as to the final number of Merger Shares, if any, that will be issued to the Contingent Right Holders. At that time, each Company Stockholder will be deemed to have sold his, her or its shares of Company Common Stock in a taxable transaction for a purchase price (the "*Purchase Price*") equal to the fair market value of the Merger Shares received by such Company Stockholder, and such Company Stockholder will recognize gain or loss accordingly. In addition, a portion of the Purchase Price received by each Company Stockholder will constitute imputed interest that will be taxed at ordinary rates pursuant to Section 483 of the Code. The parties shall not take any position inconsistent with the foregoing on any Tax Return or in any administrative or judicial proceeding, unless otherwise required by applicable Law.

**ARTICLE III
REPRESENTATIONS AND WARRANTIES OF COMPANY**

Company hereby represents and warrants to Parent and Merger Sub, subject to such exceptions as are specifically disclosed in the disclosure letter supplied by Company to Parent, dated as of the date hereof (the "*Company Disclosure Letter*"), as set forth below in this *Article III*.

3.1 Organization and Qualification; Subsidiaries.

(a) Company is a corporation duly organized, validly existing and in good standing under the jurisdiction of its incorporation and has the requisite corporate power and authority to own, lease and operate its assets and properties and to carry on its business as it is now being conducted, and to perform its obligations under all Contracts by which it is bound. Company is duly qualified or licensed as a foreign corporation to do business, and is in good standing, in each jurisdiction where the character of the properties owned, leased or operated by it or the nature of its activities makes such qualification or licensing necessary, except for such failures to be so duly qualified or licensed and in good standing that would not, either individually or in the aggregate, have or reasonably be expected to have an Company Material Adverse Effect.

(b) Company has no Subsidiaries, and does not own a debt, equity or other similar interest in any other Person. Company has not agreed, nor is it obligated to make, and nor is it bound by, any written, oral or other agreement, contract, sub-contract, lease, binding understanding, instrument, note, option, warranty, purchase order, license, sub-license, insurance policy, benefit

Table of Contents

plan, commitment, or undertaking of any nature, under which it may become obligated to make, any future investment in or capital contribution to any other Person. Company does not own any equity or similar interest in or any interest convertible, exchangeable or exercisable for any equity or similar interest in, any other Person.

3.2 *Capital Stock of Company.* The authorized capital stock of Company consists of the following:

(a) Company Common Stock 175,000,000 authorized shares and 108,202,786 issued and outstanding as of the date hereof;

(b) 42,082,544 of shares of Company Common Stock reserved for issuance for the exercise, conversion or vesting of all issued or granted Derivative Securities, including 2,984,000 options to purchase Company Common Stock (the "*Company Options*") granted under the equity incentive plan of the Company (the "*Company Option Plan*"), warrants to purchase 6,727,443 shares of Company Common Stock, and 32,371,101 restricted stock units ("*RSUs*").

(c) There are no shares of Company Common Stock or any Company Derivative Security held in the treasury of Company.

(d) There are no Derivative Securities issued by Company (or otherwise outstanding) other than as described in *Section 3.2(b)*;

(e) *Section 3.2(e)* of the Company Disclosure Letter sets forth the material information with respect to each Derivative Security issued by Company as of the date hereof.

(f) Company has made available to Parent accurate and complete copies of the Company Option Plan and each agreement, instrument or certificate evidencing a Derivative Security. All shares of Company Common Stock subject to the issuance upon the exercise, conversion or vesting of any Derivative Security, upon issuance on the terms and conditions specified in the instrument pursuant to which they are issuable, would be duly authorized, validly issued, fully paid and nonassessable. Except for the Company Option Plan and the outstanding RSUs, Company does not have any stock option plan or any other plan, program, agreement or arrangement providing for any equity or equity-based compensation for any Person.

(g) Except as set forth in *Section 3.3(g)* of the Company Disclosure Letter, all outstanding shares of Company Common Stock and all outstanding Company Options under the Company Option Plan have been issued and granted in compliance in all material respects with: (i) all applicable Laws and Orders or otherwise put into effect by or under the authority of any Governmental Entity; and (ii) all requirements set forth in applicable Contracts and the Company Option Plan.

(h) There are no registration rights, and there is no voting trust, proxy, rights plan, antitakeover plan or other agreement or understanding to which Company is a party or by which it is bound, with respect to any equity security of any class of Company.

(i) Except for the Derivative Securities described in *Section 3.3(b)*, there is no: (i) outstanding subscription, option, call, warrant or right (whether or not currently exercisable) to acquire any shares of the capital stock or other securities of Company; (ii) outstanding security, instrument or obligation that is or may become convertible into or exchangeable for any shares of the capital stock or other securities of Company; or (iii) stockholder rights plan (or similar plan commonly referred to as a "poison pill") or Contract under which Company is or may become obligated to sell or otherwise issue any shares of its capital stock or any other securities.

(j) All of the outstanding shares of Company Common Stock have been duly authorized and validly issued, and are fully paid and nonassessable. None of the outstanding shares of Company

Table of Contents

Common Stock is entitled or subject to any preemptive right, right of participation or any similar right and none of the outstanding shares of Company Common Stock is subject to any right of first refusal in favor of Company.

(k) There is no Contract relating to the voting or registration of, or restricting any Person from purchasing, selling, pledging or otherwise disposing of (or granting any option or similar right with respect to), any shares of Company Common Stock of Company. Company is not under any obligation, nor is it bound by any Contract pursuant to which it may become obligated, to repurchase, redeem or otherwise acquire any outstanding shares of Company Common Stock or other securities.

3.3 *Authority Relative to this Agreement.* Company has all necessary corporate power and authority to execute and deliver this Agreement and all other Transaction Documents to which it is a party (the "*Company Transaction Documents*") and to perform its obligations hereunder and thereunder, to consummate the transactions contemplated hereby and thereby. The execution and delivery of this Agreement and the Company Transaction Documents by Company and the consummation by Company of the transactions contemplated hereby and thereby have been duly and validly authorized by all necessary corporate action on the part of Company and no other corporate proceedings on the part of Company are necessary to authorize this Agreement and the Company Transaction Documents or to consummate the transactions so contemplated. This Agreement and the Company Transaction Documents have been duly and validly executed and delivered by Company and, assuming the due authorization, execution and delivery by the other parties thereto, constitute the legal and binding obligation of Company, enforceable against Company in accordance with their respective terms, subject to: (i) the effect of bankruptcy, fraudulent conveyance, reorganization, moratorium and other similar laws relating to or affecting the enforcement of creditor's rights generally; and (ii) general equitable principles (whether considered in a proceeding in equity or at law).

3.4 *No Conflict; Required Filings and Consents.*

(a) Subject only to the filing and recordation of the Certificate of Merger pursuant to the DGCL, the execution and delivery of this Agreement and the Company Transaction Documents by Company does not, and the performance of this Agreement and the Transaction Documents by Company will not: (i) conflict with or violate the organizational documents of Company; (ii) conflict with or violate any Law applicable to Company; (iii) contravene, conflict with or result in a violation of, or give any Governmental Entity or any other Person the right to challenge the Merger or any of the transactions contemplated by this Agreement or any of the Company Transaction Documents or to exercise any remedy or obtain any relief under, any Law or any Order to which Company or any of the assets owned, used or controlled by it is subject; (iv) contravene, conflict with or result in a violation of any of the terms or requirements of, or give any Governmental Entity the right to revoke, withdraw, suspend, cancel, terminate or modify, any governmental authorization that is held by Company or that otherwise relates to any of the assets owned, used or controlled by Company; (v) result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or impair the Company's rights or alter the rights or obligations of any third party under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of a Lien on any of the properties or assets of Company pursuant to, any material Contract to which Company is a party or by which Company or any of its properties are bound or affected; or (vi) cause the acceleration of any vesting of any awards for or rights to Company Common Stock or the payment of or the acceleration of payment of any change in control, severance, bonus or other cash payments or issuance of Company Common Stock. *Section 3.4* of the Company Disclosure Letter sets forth a list of all material Contracts that require a consent to be obtained or a notice to be given in connection with the execution and delivery of this Agreement or the consummation of the Merger and any of the Transactions.

Table of Contents

(b) The execution and delivery of this Agreement and the Company Transaction Documents by Company does not, and the performance of this Agreement and the Company Transaction Documents by Company will not, require any consent, approval, authorization or permit of, or registration, filing with or notification to, any court, administrative agency, commission, governmental or regulatory authority, domestic or foreign (each, a "Governmental Entity" and, collectively, "Governmental Entities") or any Person, except for: (i) applicable requirements, if any, of the Securities Act of 1933, as amended (the "Securities Act"), the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and U.S. state securities laws ("Blue Sky Laws"); and (ii) the filing and recordation of the Certificate of Merger as required by the DGCL.

3.5 *Financial Statements.*

(a) *Section 3.5(a)* of the Company Disclosure Letter contains true and complete copies of (i) the audited balance sheet of Company as of and for the year ended December 31, 2015 and the audited balance sheet as of and for the year ended December 31, 2016, and for each case, the related statements of income, cash flows and changes in stockholders' equity of Company as of and for the years ended December 31, 2015 and December 31, 2016 (collectively, the "Company Financial Statements"). Except as set forth on *Schedule 3.5(a)* of the Company Disclosure Letter, the Company Financial Statements: (i) were prepared in accordance with generally accepted accounting principles of the United States ("GAAP"), applied on a consistent basis during the periods involved (except as may be indicated therein in the notes thereto); (ii) fairly present in all material respects the financial position of Company as at the respective dates thereof and the results of its operations and cash flows for the respective periods then ended; and (iii) were compiled from, and are consistent with, the books and records of the Company, which books and records are accurate and complete in all material respects.

(b) Company maintains a system of internal accounting controls designed to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Company maintains internal control over financial reporting that provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

(c) Except as disclosed in the footnotes to the Company Financial Statements Company is not a party to, nor has any commitment to become a party to, any joint venture, off balance sheet partnership or any similar Contract, where the result, purpose or intended effect of such Contract is to avoid disclosure of any material transaction involving, or material Liabilities of, Company in Company's financial statements.

(d) Company does not have outstanding any "extensions of credit" (within the meaning of Section 402 of the Sarbanes-Oxley Act of 2002 (including the rules and regulations promulgated thereunder, the "Sarbanes-Oxley Act")) to any of its directors or executive officers (as defined in Rule 3b-7 under the Exchange Act).

(e) *Section 3.5(e)* of the Company Disclosure Letter is a complete listing of all of the Indebtedness and Liabilities of Company that will be outstanding after the Merger, including: (i) the Persons to whom such Indebtedness is owed, (ii) the material terms of such Indebtedness and (iii) any and all Liens associated with such Indebtedness. Company has not guaranteed nor is it responsible or liable for any Indebtedness, liability or other obligation of any Person.

Table of Contents

3.6 *Compliance; Permits.*

(a) Company is not in conflict with, or in default or violation of: (i) any Law or Order applicable to Company, or by which any of its properties is bound or affected; or (ii) any Contract to which Company is a party or by which Company or any of its properties is bound or affected, except for any conflicts, defaults or violations of such Laws, Orders or Contracts that (individually or in the aggregate) would not have or reasonably be expected to have an Company Material Adverse Effect. To the Knowledge of Company, no investigation or review by any Governmental Entity is pending or overtly threatened against Company, other than, in each such case, those the outcome of which would not, individually or in the aggregate, have or reasonably be expected to have a Company Material Adverse Effect.

(b) Company holds all permits, licenses, variances, exemptions, orders and approvals from Governmental Entities which are material to operation of the business of Company as currently conducted (collectively, the "*Company Permits*"). To the Knowledge of Company, Company is in compliance in all material respects with the terms of each of the Company Permits.

(c) Company is in possession of all franchises, grants, authorizations, licenses, permits, easements, consents, certificates, approvals and orders ("*Company Approvals*") necessary to own, lease and operate the properties it purports to own, operate or lease and to carry on its business as it is now being conducted, except where the failure to have such Company Approvals would not, individually or in the aggregate, have or reasonably be expected to have an Company Material Adverse Effect.

3.7 *No Undisclosed Liabilities.* Except for matters reflected or reserved against in the Company Financial Statements or set forth in the Company Disclosure Letter or as are incurred in connection with the Transactions, Company did not have at such date, and has not incurred since that date, any Liabilities, except Liabilities or obligations which were incurred in the ordinary course of business consistent with past practice, or Liabilities which, in the aggregate would not be reasonably expected to have, a Company Material Adverse Effect.

3.8 *Absence of Litigation.*

(a) Except as set forth on *Section 3.8* of the Company Disclosure Letter, there are no Legal Actions pending or, to the Knowledge of Company, threatened against Company, or any properties or rights of Company: (i) that involves Company or any of the assets owned, used or controlled by Company or any Person whose liability Company has or may have retained or assumed, either contractually or by operation of law; or (ii) that challenges, or that may have the effect of preventing, delaying, making illegal or otherwise interfering with, the Merger or any of the other transactions contemplated by this Agreement or any of the Transaction Documents.

(b) There is no Order to which Company, or any of the assets owned or used by Company is subject. To the Knowledge of Company, there is no proposed Order that, if issued or otherwise put into effect (i) could have a material adverse effect on the business or on the ability of Company to comply with or perform any covenant or obligation under this Agreement or any of the Transaction Documents or (ii) could have the effect of preventing, delaying, making illegal or otherwise interfering with the Merger or any of the other transactions contemplated by this Agreement or the Transaction Documents.

3.9 *Employees and Employee Benefit Plans.*

(a) *Section 3.9(a)* of the Company Disclosure Letter contains an accurate list of each current employee of Company as of a date no earlier than five (5) days prior to the date hereof, along with: (i) the name, title or classification, date of hire and exempt/non-exempt status of each employee; and (ii) each employee's annualized base compensation. Each such employee will be

Table of Contents

terminated effective upon the closing of the Merger, such that the Surviving Company will not have any employees immediately following the Merger.

(b) *Section 3.9(b)* of the Company Disclosure Letter contains an accurate and complete list of (a) all "employee benefit plans" as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("*ERISA*") and (b) all employment, severance, golden parachute, compensation, bonus, termination, retirement, retention, change in control, deferred compensation, consulting, commission, equity or equity-based compensation, health, life insurance, disability, welfare, paid time off, fringe benefit and other compensation agreement, contract, plan, program, understanding or arrangement (including established working practices and employment policies), in any case, whether oral or written, and whether or not legally enforceable, maintained, contributed to, or required to be contributed to, by the Company or any other person or entity that would be treated with the Company as a single employer under Code Section 414 (each, an "*ERISA Affiliate*") for the benefit of any current or former employee, officer, director, independent contractor, consultant, member or manager of the Company, or under which the Company has any actual or contingent Liability (collectively, the "*Company Plans*").

(c) Except as set forth in *Section 3.9(c)* of the Company Disclosure Letter, each Company Plan is in compliance with, and has been maintained in accordance with, its terms and the applicable provisions of ERISA, the Code and all other Laws and Orders.

(d) Except as set forth in *Section 3.9(d)* of the Company Disclosure Letter, there are no audits, investigations, actions, suits or claims pending or, to the Company's Knowledge threatened against any Company Plan or against the Company relating to any Company Plan, or the assets of such plans, and no facts exist that could give rise to any such action, suit or claim. Neither the Company nor any ERISA Affiliate thereof has engaged in any transaction involving any Company Plan which is a "prohibited transaction" under Section 406 of ERISA or Section 4975 of the Code for which an exemption does not exist or has been granted.

(e) Neither the Company nor any ERISA Affiliate thereof maintains, contributes to, or is required to contribute to, or has any actual or contingent Liability with respect to, any (i) employee benefit plan subject to Title IV of ERISA or Section 412 of the Code, (ii) "multiple employer welfare arrangement," as defined in Section 3(40) of ERISA, (iii) "multiple employer plan" as defined in Section 413(c) of the Code or (iv) "multiemployer plan" as defined in Section 3(37) of ERISA. All Company Plans which are "employee pension benefit plans" within the meaning of Section 3(2) of ERISA and which are intended to meet the qualification requirements of Section 401(a) of the Code have at all times since their inception met and currently meet the qualification requirements of Section 401(a) of the Code, and each related trust has at all times since its inception been and currently is exempt from taxation under Section 501(a) of the Code, and no circumstances exist that would adversely affect such qualification or exemption from taxation. No Company Plan provides (and no promise has been made to provide) medical, dental, vision, life insurance or other welfare benefits beyond termination of service or retirement (other than as required by Law). The Company's execution of, and performance of the Transactions will not (either alone or when combined with any other event) result in the provision of any "parachute payment" (as defined in Code Section 280G).

(f) As applicable, with respect to each of the Company Plans, the Company has delivered to Parent true and complete copies of (i) all plan documents (including all amendments thereto, and in the case of an unwritten Company Plan, a written description thereof), (ii) all current trust documents, insurance contracts, custodial agreements and investment management agreements relating thereto and, in all cases, all amendments thereto; (iii) the current summary plan description and each summary of material modifications thereto; (iv) the three most recently filed annual reports (Form 5500 and all schedules thereto); (v) the most recent IRS determination or

Table of Contents

opinion letter and each currently pending application to the IRS for a determination letter; (vi) the three most recent summary annual reports, actuarial reports, financial statements and trustee reports; and (vii) all records, notices and filings concerning IRS or Department of Labor audits or investigations and "prohibited transactions" within the meaning of Section 406 of ERISA or Section 4975 of the Code.

3.10 *Labor Matters.*

(a) Company is not a party to any collective bargaining agreement or other labor union contract applicable to Persons employed by Company; and (ii) Company does not have any Knowledge of any strikes, slowdowns, work stoppages or lockouts, or threats thereof, by or with respect to any employees of Company.

(b) During the past three (3) years: (i) Company is and has been in material compliance with all applicable Laws with respect to labor and employment, including Laws with respect to fair employment practices, discrimination, immigration and naturalization, retaliation, work place safety and health, unemployment compensation, workers' compensation, affirmative action, terms and conditions of employment and wages and hours; (ii) to the Knowledge of Company, there have been no Legal Actions pending before any Governmental Entity, or threats thereof with respect to labor and employment matters, including Legal Actions between Company (on the one hand) and any of the current or former employees or current or former workers of Company (on the other hand); (iii) there have been no written notices of charges of discrimination in employment or employment practices for any reason or noncompliance with any other Law with respect to labor or employment that have been asserted, before the United States Equal Employment Opportunity Commission or any other Governmental Entity; (iv) Company has not been a party to, or otherwise bound by, any consent decree or settlement agreement with, or citation by, any Governmental Entity relating to the current or former employees or employment practices; and (v) to the Knowledge of Company, Company has not been subject to any audit or investigation by the Occupational Safety and Health Administration, the DOL, or other Governmental Entity with respect to labor or employment Laws or with respect to the employees of Company, or subject to fines, penalties, or assessments associated with such audits or investigations.

(c) To the Knowledge of Company, all of the employees of Company are: (i) United States citizens or lawful permanent residents of the United States; (ii) aliens whose right to work in the United States is unrestricted; or (iii) aliens who have valid, unexpired work authorizations issued by the United States government.

(d) To the Knowledge of Company, Company has properly treated all individuals performing rendered services to Company as employees, leased employees, independent contractors or agents, as applicable, for all federal, state, local and foreign Tax purposes. There has been no determination by any Governmental Entity that any independent contractor is an employee of Company.

3.11 *Title to Assets; Property.*

(a) Company owns, and has good and valid title to, or, in the case of leased properties and assets, valid leasehold interests in, all tangible properties or assets and equipment used or held for use in its business or operations or purported to be owned or leased by it, including: (i) all assets reflected on the Company Financial Statements for the year ended December 31, 2016; and (ii) all other assets reflected in the books and records of Company as being owned by Company, except as would not reasonably be expected to result in a Company Material Adverse Effect. All of said assets are owned by Company free and clear of any Liens, except for Permitted Liens.

(b) Company does not own any real property. *Section 3.11* of the Company Disclosure Letter identifies by street address all real property leased or subleased by Company (the "*Company*")

Table of Contents

Leased Real Estate"). All Company Leased Real Estate is leased or licensed to Company pursuant to written leases or Contracts (collectively the "*Company Leases*"). Company has a valid leasehold interest in Company Leased Real Estate that is leased to it, free and clear of all Liens. Company has not subleased any Company Leased Real Estate. Company Leased Real Estate is not subject to any third-party licenses, concessions, leases or tenancies of any kind, except as indicated on *Section 3.11* of the Company Disclosure Letter. Company Leases are in full force and effect. To the Knowledge of Company, there are no defaults in any material respect on the part of any landlord, sublandlord, licensor or Company under the Company Leases. Company has performed in all material respects all of the obligations on its part to be performed under the Company Leases. No written consent of any landlord or sublandlord or any licensor under Company Leases is required or necessary in order to consummate the transactions contemplated by this Agreement and the Company Transaction Documents except as otherwise provided in *Section 3.11* of the Company Disclosure Letter.

3.12 *Taxes / Definition of Taxes.*

(a) For all purposes of and under this Agreement, "*Tax*" or "*Taxes*" refers to any and all federal, state, local and foreign taxes, assessments and other governmental charges, duties, impositions and other Liabilities relating to taxes, including taxes based upon or measured by gross receipts, income, profits, sales, use and occupation, and value added, ad valorem, transfer, franchise, withholding, payroll, recapture, employment, excise and property taxes, together with all interest, penalties, backup withholding and additions imposed with respect to such amounts and any obligations under any agreements or arrangements with any other Person with respect to such amounts and including any Liability for the foregoing arising from the operation of law or from a predecessor or transferor entity.

(b) The Company has timely filed all federal, state, local and foreign returns, estimates, information statements and reports ("*Tax Returns*") required to be filed by it, and all such Tax Returns are accurate, complete and correct. The Company has paid all Taxes required to be paid by it (whether or not shown on any Tax Return described in the preceding sentence). There is no Tax audit or examination now pending or threatened with respect to the Company. No claim has ever been made in writing by any Governmental Entity in a jurisdiction where the Company does not pay Taxes or file Tax Returns that the Company is or may be subject to Tax by that jurisdiction. The Company has not requested or entered into an agreement providing for any extension of time within which to file any Tax Return, make any Tax election, pay any Taxes or pursuant to which any Governmental Entity may assess Taxes. All Taxes which the Company was or is required by applicable Law to withhold or collect have been and are being withheld or collected by it and have been paid over to the proper Governmental Entity or, if not yet due, are being held by the Company for payment. The Company has collected and remitted sales, use, value added and similar Taxes applicable in connection with the assets of the Company and the operation of the Company's business. The Company has never entered into a "closing agreement" as defined in Section 7121 of the Code. There is no lien for Taxes upon any of the assets of the Company other than liens for Taxes that are not yet due and payable. The Company has used the accrual method of accounting at all times since its date of incorporation for U.S. federal income Tax purposes. For purposes of this Section 3.13, each reference to the Company includes any person that was liquidated into, merged with or otherwise a predecessor to, the Company.

3.13 *Environmental Matters.* To the Knowledge of Company, Company is in compliance, in all material respects, with all applicable Environmental Laws and Environmental Permits. Company is not required to hold any Environmental Permits for the operation of its businesses. To the Knowledge of Company, there is no Environmental Claim pending or overtly threatened against Company nor is there any reasonable basis for any such claim or any Liability, in each case, under any applicable Environmental Law.

Table of Contents

3.14 *Intellectual Property.*

(a) *Section 3.14(a)* of the Company Disclosure Letter contains an accurate and complete list of all Company Registered Intellectual Property Rights, specifying as to each such Registered Intellectual Property Right, as applicable: (i) the jurisdictions by or in which such Registered Intellectual Property Right has been issued or registered or in which an application for such issuance or registration has been filed; and (ii) the registration or application numbers thereof. *Section 3.14(a)* of the Company Disclosure Letter contains an accurate and complete list of all Company Licensed Intellectual Property Rights that are material to the business of Company.

(b) *Section 3.14(b)* of the Company Disclosure Letter lists any License Agreements or Contracts under which Company has granted any third party rights that are exclusive, or exclusive of all other third parties, to use, sublicense, resell or distribute any Company Owned Intellectual Property Right.

(c) Company is not a party to any License Agreements, forbearances to sue, consents, judgments, orders or similar obligations, in each case, that restrict the rights of Company to use or enforce any Company Owned Intellectual Property Rights.

(d) Company owns all right, title, and interest, free and clear of all security interests and similar encumbrances (other than Permitted Liens), in and to all Intellectual Property Rights used or held for use in the business of Company (other than Company Licensed Intellectual Property Rights or Intellectual Property Rights that are not material to the business of Company). Except as listed in *Section 3.14(d)* of the Company Disclosure Letter, Company is listed in the records of the appropriate United States, state or foreign agency as the sole owner for each Company Registered Intellectual Property Right.

(e) To Company's Knowledge, the conduct of the business of Company as such business is currently conducted: (i) does not infringe, misappropriate or otherwise violate the Intellectual Property Rights of any third party; and (ii) does not constitute unfair competition or unfair trade practices under the Laws in the United States.

(f) Company has not received any written, or, to the Knowledge of Company, oral communications from any third party that overtly claim that the operation of the business of Company infringes, misappropriates or otherwise violates the Intellectual Property Rights of any third party or constitutes unfair competition or unfair trade practices under the Laws of any jurisdiction. Except as set forth in *Section 3.14(f)* of the Company Disclosure Letter, Company has not received any written communication from a third party pursuant to which the third party offered Company a license to use any technology or Intellectual Property Rights in order to avoid a claim of infringement or misappropriation.

(g) Company has not received written notice of, and to the Knowledge of Company, there is no pending or threatened Legal Action by a third party before any Governmental Entity in any jurisdiction challenging the ownership, use, validity, enforceability or registrability of any Company Owned Intellectual Property Rights.

(h) To the Knowledge of Company, no Person has infringed, misappropriated, or otherwise violated, or is infringing, misappropriating, or otherwise violating, any Company Owned Intellectual Property Rights. Company has not brought any Legal Action against any third party alleging infringement, misappropriation or violation of Company Owned Intellectual Property Rights that remain unresolved.

(i) To the Knowledge of Company, Company Owned Intellectual Property Rights are subsisting, in full force and effect, have not been cancelled or abandoned, have not expired, and, with respect to Company Registered Intellectual Property Rights only, are valid and enforceable.

Table of Contents

(j) Company has made commercially reasonable efforts to protect its trade secrets and preserve their status as intellectual property under applicable Law. Company has in place a policy requiring all employees, contractors and other parties having access to such trade secrets to execute a commercially reasonable form of proprietary information/confidentiality agreement with Company.

(k) Following the Effective Time, the Surviving Corporation will be permitted to exercise all of the rights of Company under such License Agreements or Contracts to the same extent Company would have been able to had the Transactions not occurred and without the payment of additional amounts or consideration other than ongoing fees, royalties or payments which Company would otherwise be required to pay. The consummation of the Merger and the Transactions will not: (i) result in the loss or impairment of Company's ownership of or right to use Company Owned Intellectual Property Rights or Company Licensed Intellectual Property Rights; or (ii) cause the Surviving Corporation or any of its Affiliates (x) to be bound by any non-compete or other restriction on the operation of any business or (y) to grant any rights or licenses to any Intellectual Property Rights of the Surviving Corporation or any of its Affiliates to a third party (including a covenant not to sue).

3.15 *Material Agreements.* Section 3.15 of the Company Disclosure Letter sets forth a list of all Company Material Agreements. All of the Company Material Agreements are in full force and effect and constitute the valid, legal and binding obligation of Company and, to the Knowledge of Company, constitute the valid, legal and binding obligation of the other parties thereof, enforceable against each such Person in accordance with its terms, subject to: (i) the effect of bankruptcy, fraudulent conveyance, reorganization, moratorium and other similar laws relating to or affecting the enforcement of creditor's rights generally; and (ii) general equitable principles (whether considered in a proceeding in equity or at law). Company has not violated or breached, or committed any default under, any Company Material Agreement, and, to the Knowledge of Company, no other Person has violated or breached, or committed any default under, any Company Material Agreement. Company has not received or given any notice or claim of breach or violation of, or default under, any Company Material Agreement. Company has not received or given any notice of an intention to terminate, not renew or challenge the validity or enforceability of any Company Material Agreement. No event has occurred, and no circumstance or condition exists that, with or without notice or lapse of time or both, would, or would reasonably be expected to, (i) result in a material violation or breach of any of the provisions of any Company Material Agreement; (ii) give any Person the right to declare a default or exercise any remedy under any Company Material Agreement; (iii) give any Person the right to accelerate the maturity or performance of any Company Material Agreement; or (iv) give any Person the right to cancel, terminate or materially modify any Company Material Agreement. Each Company Material Agreement will continue to be legal, valid, binding, enforceable, and in full force and effect on substantially identical terms immediately following the consummation of the Transactions, and the consummation of the Transactions shall not (either alone or upon the occurrence of additional acts or events) result in any payment or payments becoming due from Company to any Person or give any Person the right to terminate or alter the provisions of such Company Material Agreement.

3.16 *Agreements with Regulatory Agencies.* Company (a) is not subject to any cease-and-desist or other Order issued by, (b) is not a party to any Contract, consent agreement or memorandum of understanding with, (c) is not a party to any commitment letter or similar undertaking to, (d) is not subject to any order or directive by, (e) is not a recipient of any extraordinary supervisory letter from, and (f) has not adopted any board resolutions at the request of (each of clauses (a)-(e) of this Section 3.16, a "Regulatory Agreement"), any Governmental Entity that restricts the conduct of its business or that in any manner relates to its management or its business, or would reasonably be expected, following the Merger and the consummation of the Transactions, to impair in any material respect the Surviving Corporation's ability to conduct the business of Company after the Effective Time, as presently conducted.

Table of Contents

3.17 *Related Party Transactions.* Other than in respect of Contracts or interests related to employment in the ordinary course of business or incentive arrangements under the Company Option Plan, and except as disclosed or otherwise contemplated under this Agreement, to the knowledge of the Company, no Person who is or was a Related Party at any time up to and including the Closing Date (i) is a party to any Contract with or binding upon Company or any of its assets, rights or properties or has any interest in any property owned by any member of Company or has engaged in any transaction with any of the foregoing since January 1, 2015, (ii) has any direct or indirect ownership interest in any material asset used in the business of Company, (iii) is indebted to Company, or (iv) since January 1, 2015, has entered into, or has had any direct or indirect financial interest in, any Contract, transaction or business dealing involving Company.

3.18 *Insurance.* All casualty, general liability, business interruption, product liability, director & officer liability, worker's compensation, environmental, automobile and sprinkler and water damage and other insurance policies and bond and surety arrangements maintained Company are listed in *Section 3.18* of the Company Disclosure Letter (the "*Company Insurance Policies*"), including historical property and casualty claims information with respect to the five (5)-year period prior to the date hereof indicating pending and paid claims as of the date hereof. Company has not received any notice from the applicable carrier regarding any refusal of coverage under, or any rejection of any claim under, any such policies. There are no claims related to the business of Company pending under any Company Insurance Policy as to which coverage has been questioned, denied or disputed or in respect of which there is an outstanding reservation of rights.

3.19 *Brokers.* Company has not incurred, or will not incur, directly or indirectly, any Liability for brokerage or finder's fees or agent's commissions or any similar charges in connection with this Agreement or any transaction contemplated hereby.

3.20 *Inapplicability of Anti-takeover Statutes.* The Board of Directors of Company has taken and will take all actions necessary to ensure that the restrictions applicable to business combinations contained in the DGCL are, and will be, inapplicable to the execution, delivery and performance by the Company of this Agreement and to the consummation of the Merger and the Transactions.

3.21 *Full Disclosure.* Neither this Agreement (including the Company Disclosure Letter) nor any Transaction Document: (i) contains any representation or warranty by Company or information regarding Company that is false or misleading with respect to any material fact; or (ii) omits to state any material fact necessary in order to make the representations and warranties regarding Company contained herein and therein, in light of the circumstances under which such representations and warranties were or will be made or provided, not false or misleading.

**ARTICLE IV
REPRESENTATIONS AND WARRANTIES OF PARENT**

Parent hereby represents and warrants to Company, subject to such exceptions as are specifically disclosed in writing (with reference to a specific section of this Agreement to which each such exception applies) in the disclosure letter supplied by Parent to Company, dated as of the date hereof (the "*Parent Disclosure Letter*") as set forth below in this Article IV.

4.1 *Organization and Qualification; Subsidiaries.*

(a) Parent and Merger Sub each is a corporation duly organized, validly existing and in good standing under the Laws of the jurisdiction of its incorporation and has the requisite corporate power and authority to own, lease and operate its assets and properties and to carry on its business as it is now being conducted, and to perform its obligations under all Contracts by which it is bound. As of the date of this Agreement, except for incidental Liabilities incurred in connection with its organization and except for the Transactions, Merger Sub has not engaged in any other

Table of Contents

business activities or incurred any other Liabilities, or entered into any agreements or arrangements with any Person.

4.2 *Capital Stock of Parent.* The authorized capital stock of Parent consists of the following:

(a) Preferred stock, par value \$0.0001 per share: authorized shares of 10,000,000 and no shares issued or outstanding as of the date hereof;

(b) Parent Common Stock, \$0.0001 par value: 50,000,000 authorized shares and 14,424,128 issued and outstanding as of the date hereof;

(c) 8,889,231 shares of Parent Common Stock reserved for issuance for the exercise or conversion of all issued or granted Derivative Securities, including:

(i) Warrants to purchase 6,339,792 shares of Parent Common Stock;

(ii) Options to purchase 2,528,650 shares of Parent Common Stock (the "*Parent Options*") granted under either Parent's 2013 Equity Incentive Plan or the Jaguar Stock Plan (collectively, the "*Parent Option Plans*"); and

(iii) 20,789 RSUs granted under the Parent Option Plans.

(d) There are no Derivative Securities issued by Parent (or otherwise outstanding) other than as described in *Section 4.2(c)* or in the Parent 2016 SEC Documents;

(e) All shares of Parent Common Stock subject to the issuance upon the exercise or conversion of any Derivative Security, upon issuance on the terms and conditions specified in the instrument pursuant to which they are issuable, would be duly authorized, validly issued, fully paid and nonassessable. Except for the Parent Option Plans, Parent does not have any stock option plan or any other plan, program, agreement or arrangement providing for any equity or equity-based compensation for any Person.

(f) All outstanding shares of Parent Common Stock Options under the Parent Option Plans have been issued and granted in compliance in all material respects with: (i) all Laws and Orders or otherwise put into effect by or under the authority of any Governmental Entity; and (ii) all requirements set forth in applicable Contracts and the Parent Option Plans.

(g) Except as set forth in *Section 4.2(g)* of the Parent Disclosure Letter, there are no registration rights, and there is no voting trust, proxy, rights plan, antitakeover plan or other agreement or understanding to which Parent is a party or by which it is bound, with respect to any equity security of any class of Parent.

(h) Except as disclosed in the Parent 2016 SEC Documents, there is no: (i) outstanding subscription, option, call, warrant or right (whether or not currently exercisable) to acquire any shares of the capital stock or other securities of Parent or any Parent Subsidiary; (ii) outstanding security, instrument or obligation that is or may become convertible into or exchangeable for any shares of the capital stock or other securities of Parent or any Parent Subsidiary; or (iii) stockholder rights plan (or similar plan commonly referred to as a "poison pill") or Contract under which Parent or any Parent Subsidiary is or may become obligated to sell or otherwise issue any shares of its capital stock or any other securities.

(i) All of the outstanding shares of Parent Common Stock have been duly authorized and validly issued, and are fully paid and nonassessable. None of the outstanding shares of Parent Common Stock is entitled or subject to any preemptive right, right of participation or any similar right and none of the outstanding shares of Parent Common Stock is subject to any right of first refusal in favor of Parent or any Parent Subsidiary.

Table of Contents

(j) Except as disclosed in the Parent 2016 SEC Documents, there is no Contract relating to the voting or registration of, or restricting any Person from purchasing, selling, pledging or otherwise disposing of (or granting any option or similar right with respect to), any shares of Parent Common Stock. Parent is not under any obligation, nor is it bound by any Contract pursuant to which it may become obligated, to repurchase, redeem or otherwise acquire any outstanding shares of Parent Common Stock or other securities.

4.3 *Authority Relative to this Agreement.* Each of Parent and Merger Sub has all necessary corporate power and authority to execute and deliver this Agreement and all other Transaction Documents to which it is a party (the "*Parent Transaction Documents*"), to perform its obligations hereunder and thereunder, and to consummate the transactions contemplated hereby and thereby. The execution and delivery of this Agreement and the Parent Transaction Documents by Parent and Merger Sub, and the consummation by Parent and Merger Sub of the transactions contemplated hereby and thereby, have been duly and validly authorized by all necessary corporate action on the part of Parent and Merger Sub, and no other corporate proceedings on the part of Parent or Merger Sub are necessary to authorize this Agreement and the Parent Transaction Documents or to consummate the transactions so contemplated. This Agreement and the Parent Transaction Documents have been duly and validly executed and delivered by Parent and Merger Sub and, assuming the due authorization, execution and delivery by the other parties thereto, constitute the legal and binding obligation of Parent and Merger Sub, enforceable against Parent and Merger Sub in accordance with their respective terms, subject to: (i) the effect of bankruptcy, fraudulent conveyance, reorganization, moratorium and other similar laws relating to or affecting the enforcement of creditor's rights generally; and (ii) general equitable principles (whether considered in a proceeding in equity or at law).

4.4 *No Conflict; Required Filings and Consents.*

(a) Subject only to the filing and recordation of the Certificate of Merger pursuant to the DGCL and except as set forth on Section 4.4 of the Parent Disclosure Letter, the execution and delivery of this Agreement and the Parent Transaction Documents by Parent does not, and the performance of this Agreement and the Transaction Documents by Parent will not: (i) conflict with or violate the organizational documents of Parent; (ii) conflict with or violate any Law applicable to Parent or by which its properties is bound or affected; (iii) contravene, conflict with or result in a violation of, or give any Governmental Entity or any other Person the right to challenge the Merger or any of the Transactions or any of the Parent Transaction Documents or to exercise any remedy or obtain any relief under, any Law or any Order to which Parent or any of the assets owned, used or controlled by Parent is subject; (iv) contravene, conflict with or result in a violation of any of the terms or requirements of, or give any Governmental Entity the right to revoke, withdraw, suspend, cancel, terminate or modify, any governmental authorization that is held by Parent or that otherwise relates to any of the assets owned, used or controlled by Parent; (v) result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or impair Parent's rights or alter the rights or obligations of any third party under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of a Lien on any of the properties or assets of Parent pursuant to, any material Contract to which Parent is a party or by which Parent or any of its properties are bound or affected; or (vi) cause the acceleration of any vesting of any awards for or rights to Parent Common Stock or the payment of or the acceleration of payment of any change in control, severance, bonus or other cash payments or issuance of Parent Common Stock.

(b) The execution and delivery of this Agreement and the Parent Transaction Documents by Parent and Merger Sub does not, and the performance of this Agreement and the Parent Transaction Documents by Parent and Merger Sub will not, require any consent, approval, authorization or permit of, or registration, filing with or notification to, any Governmental Entity or any Person, except for: (i) applicable requirements, if any, of the Securities Act, the Exchange

Table of Contents

Act, Blue Sky Laws and NASDAQ and (ii) the filing and recordation of the Certificate of Merger as required by the DGCL.

4.5 *Reports and Financial Statements; Internal Controls.*

(a) Parent has filed all forms, reports and documents required to be filed by it with the SEC (all such required forms, reports and documents are referred to herein as the "*Parent SEC Documents*"). As of their respective dates, the Parent SEC Documents: (i) were prepared in accordance in all material respects with the requirements of the Securities Act or the Exchange Act, as the case may be, and the rules and regulations of the SEC thereunder applicable to such Parent SEC Documents; and (ii) did not at the time they were filed (or if amended or superseded by a filing prior to the date of this Agreement, then on the date of such filing) contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The certifications and statements required by (x) Rule 13a-14 under the Exchange Act and (y) 18 U.S.C. §1350 (Section 906 of the Sarbanes-Oxley Act) relating to the Parent SEC Documents are accurate and complete and comply as to form and content with all applicable legal requirements.

(b) The audited consolidated financial statements of Parent as of and for the years ended December 31, 2015 and December 31, 2016, including, in each case, the notes, if any, thereto (collectively, the "*Parent Financial Statements*"): (i) complied as to form in all material respects with the published rules and regulations of Regulation S-X promulgated by the SEC; (ii) were prepared in accordance with GAAP, applied on a consistent basis during the periods involved (except as may be indicated therein in the notes thereto); (iii) fairly present in all material respects the financial position of Parent as at the respective dates thereof and the results of its operations and cash flows for the respective periods then ended; and (iv) were compiled from, and are consistent with, the books and records of Parent, which books and records are accurate and complete in all material respects.

(c) Except as disclosed in the footnotes to the Parent Financial Statements, *Section 4.5(c)* of the Parent Disclosure Letter or in Parent 2016 SEC Documents, the Parent is not a party to, nor has any commitment to become a party to, any joint venture, off balance sheet partnership or any similar Contract where the result, purpose or intended effect of such Contract is to avoid disclosure of any material transaction involving, or material Liabilities of, the Parent in Parent's financial statements.

(d) *Section 4.5(d)* of the Parent Disclosure Letter and/or the Parent 2016 SEC Reports, as applicable, sets forth all of the Indebtedness of Parent, including: (i) the Persons (or a general description of the Persons) to whom such Indebtedness is owed, and (ii) the material terms of such Indebtedness. Parent has not guaranteed nor is Parent responsible or liable for any Indebtedness, liability or other obligation of any Person, except as set forth in *Section 4.6(g)* of the Parent Disclosure Letter and/or the Parent 2016 SEC Reports.

(e) To the Knowledge of Parent, since Parent has been subject to the Sarbanes-Oxley Act as a SEC reporting issuer, no employee of Parent has provided or is providing information to any law enforcement agency regarding the violation of any applicable Law of the type described in *Section 806* of the Sarbanes-Oxley Act. Parent has not, nor, to the Knowledge of Parent, has any director, officer, employee or agent of Parent, discharged, demoted or suspended an employee of Parent because of any lawful act of such employee described in *Section 806* of the Sarbanes-Oxley Act.

Table of Contents

4.6 *Compliance; Permits.*

(a) Parent is not in conflict with, or in default or violation of: (i) any Law or Order applicable to Parent, or by which any of its properties is bound or affected; or (ii) any Contract to which Parent is a party or by which Parent or any of its properties are bound or affected, except for any conflicts, defaults or violations of such Laws, Orders or Contracts that (individually or in the aggregate) would not have or reasonably be expected to have a Parent Material Adverse Effect. To the Knowledge of Parent, no investigation or review by any Governmental Entity is pending or overtly threatened against Parent, other than, in each such case, those the outcome of which would not, individually or in the aggregate, have or reasonably be expected to have a Parent Material Adverse Effect.

4.7 *No Undisclosed Liabilities.* Except for matters reflected or reserved against in the balance sheet (including the notes thereto) as of December 31, 2016 included in the Parent Financial Statements or as disclosed in *Section 4.7* of the Parent Disclosure Letter or in the Parent 2016 SEC Documents or incurred in connection with the Transactions, Parent has not incurred since that date, any Liabilities, except Liabilities incurred in the ordinary course of business consistent with past practice, or Liabilities which, in the aggregate would not be reasonably expected to have, a Parent Material Adverse Effect.

4.8 *Absence of Litigation.*

(a) Except as set forth on *Section 4.8* of the Parent Disclosure Letter, there are no Legal Actions pending or, to the Knowledge of Parent, threatened against Parent, or any properties or rights of Parent: (i) that involves Parent or any of the assets owned, used or controlled by Parent or any Person whose liability Parent has or may have retained or assumed, either contractually or by operation of law; or (ii) that challenges, or that may have the effect of preventing, delaying, making illegal or otherwise interfering with, the Merger or any of the Transactions or any of the Transaction Documents.

(b) There is no Order to which Parent, or any of the assets owned or used by Parent, is subject. To the Knowledge of Parent, there is no proposed Order that, if issued or otherwise put into effect (i) could have a material adverse effect on the business or on the ability of Parent to comply with or perform any covenant or obligation under this Agreement or any of the Transaction Documents or (ii) could have the effect of preventing, delaying, making illegal or otherwise interfering with the Merger or any of the other transactions contemplated by this Agreement or the Transaction Documents.

4.9 *Title to Assets; Property.* Parent owns, and has good and valid title to, or, in the case of leased properties and assets, valid leasehold interests in, all tangible properties or assets and equipment used or held for use in its business or operations or purported to be owned or leased by it, including: (i) all assets reflected on the Parent Financial Statements; and (ii) all other assets reflected in the books and records of Parent as being owned by Parent, except as would not reasonably be expected to result in a Parent Material Adverse Effect. All of said assets are owned by Parent free and clear of any Liens, except for Permitted Liens.

4.10 *Taxes.* Parent has timely filed all Tax Returns required to be filed by it, and all such Tax Returns are accurate, complete and correct. Parent has paid all Taxes required to be paid by it (whether or not shown on any Tax Return described in the preceding sentence). There is no Tax audit or examination now pending or threatened with respect to Parent. No claim has ever been made in writing by any Governmental Entity in a jurisdiction where Parent does not pay Taxes or file Tax Returns that Parent is or may be subject to Tax by that jurisdiction. Parent has not requested or entered into an agreement providing for any extension of time within which to file any Tax Return, make any Tax election, pay any Taxes or pursuant to which any Governmental Entity may assess Taxes.

Table of Contents

All Taxes which Parent was or is required by applicable Law to withhold or collect have been and are being withheld or collected by it and have been paid over to the proper Governmental Entity or, if not yet due, are being held by Parent for payment. Parent has collected and remitted sales, use, value added and similar Taxes applicable in connection with the assets of Parent and the operation of Parent's business. There is no lien for Taxes upon any of the assets of Parent other than liens for Taxes that are not yet due and payable.

4.11 *Environmental Matters.* To the Knowledge of Parent, Parent is in compliance, in all material respects, with all applicable Environmental Laws and Environmental Permits. Parent is not required to hold any Environmental Permits for the operation of its businesses. To the Knowledge of Parent, there is no Environmental Claim pending or overtly threatened against Parent nor is there any reasonable basis for any such claim or any Liability, in each case, under any applicable Environmental Law.

4.12 *Intellectual Property.*

(a) *Section 4.12(a)* of the Parent Disclosure Letter lists any License Agreements or Contracts under which Parent has granted any third party rights that are exclusive, or exclusive of all other third parties, to use, sublicense, resell or distribute any Parent Owned Intellectual Property Right.

(b) Parent is not a party to any License Agreements, forbearances to sue, consents, judgments, orders or similar obligations, in each case, that restrict the rights of Parent to use or enforce any Parent Owned Intellectual Property Rights.

(c) Parent has not received any written or, to the Knowledge of Parent, oral communications from any third party that overtly claim that the operation of the business of Parent infringes, misappropriates or otherwise violates the Intellectual Property Rights of any third party or constitutes unfair competition or unfair trade practices under the Laws of any jurisdiction.

4.13 *Agreements with Regulatory Agencies.* Parent is not subject to, a party to, or a recipient of Regulatory Agreement, any Governmental Entity that restricts the conduct of its business or that in any manner relates to its management or its business, or would reasonably be expected, following the Merger and the consummation of the Transactions, to impair in any material respect the ability of Parent to conduct the business of the Parent after the Effective Time, or the ability of the Surviving Corporation to conduct the business of Company after the Effective Time, in each case, as presently conducted.

4.14 *Insurance.* All casualty, general liability, business interruption, product liability, director & officer liability, worker's compensation, environmental, automobile and sprinkler and water damage and other insurance policies and bond and surety arrangements maintained by Parent are listed in *Section 4.14* of the Parent Disclosure Letter (the "*Parent Insurance Policies*") including historical property and casualty claims information with respect to the five (5)-year period prior to the date hereof indicating pending and paid claims as of the date hereof. Parent has not received any notice from the applicable carrier regarding any refusal of coverage under, or any rejection of any claim under, any such policies. There are no claims related to the business of Parent pending under any Parent Insurance Policy as to which coverage has been questioned, denied or disputed or in respect of which there is an outstanding reservation of rights.

4.15 *Brokers.* Parent has not incurred, or will incur, directly or indirectly, any Liability for brokerage or finder's fees or agent's commissions or any similar charges in connection with this Agreement or any transaction contemplated hereby.

4.19 *Inapplicability of Anti-takeover Statutes.* The Board of Directors of Parent has taken and will take all actions necessary to ensure that the restrictions applicable to business combinations contained in the DGCL are, and will be, inapplicable to the execution, delivery and performance of this Agreement and to the consummation of the Merger and the Transactions.

Table of Contents

4.20 *Full Disclosure.* Neither this Agreement (including the Parent Disclosure Letter) nor any Parent Transaction Document: (i) contains any representation or warranty by Parent or information regarding the Parent that is false or misleading with respect to any material fact; or (ii) omits to state any material fact necessary in order to make the representations and warranties regarding Parent contained herein and therein, in light of the circumstances under which such representations and warranties were or will be made or provided, not false or misleading.

**ARTICLE V
COVENANTS AND AGREEMENTS**

5.1 *Further Assurances.* Each party hereto will, following the date hereof, execute such further documents, instruments, deeds, bills of sale, assignments and assurances and take such further actions as may reasonably be requested by the other to vest the Surviving Corporation with full title to all assets, properties, privileges, rights, approvals, immunities and franchises of Company or to effect the other purposes of this Agreement.

5.2 *Warrants/Equity-Based Awards.* At the Effective Time, by virtue of the Merger and without any action on the part of Parent, Merger Sub, the Company or the holders of any of the following securities:

(a) Each warrant issued by the Company (a "*Company Warrant*," and collectively, the "*Company Warrants*") which is then outstanding and unexercised shall cease to represent a right to acquire shares of Company Common Stock and shall be converted into and thereafter represent a Parent warrant, which shall represent a warrant exercisable for shares of Parent Common Stock, under the same terms and conditions as were applicable to such Company warrant immediately prior to the Effective Time, except: (x) the number of shares of Parent Common Stock shall be as set forth on *Schedule 2* and (y) the exercise price per share of Parent Common Stock subject to any such Parent Warrant will be \$0.08 per share (each, a "*Parent Warrant*," and collectively, the "*Parent Warrants*"). Parent has reserved a sufficient number of shares of Parent Common Stock to provide for the issuance of Parent Common Stock upon exercise of the Parent Warrants.

(b) Each Company RSU which is then outstanding shall cease to represent a right to acquire a share of Company Common Stock and shall be converted into and thereafter represent a Parent RSU which shall be subject to the provisions of the Jaguar Animal Health 2014 Stock Plan, as amended from time to time (the "*Jaguar Stock Plan*"), and which shall be issued under the same terms and conditions as were applicable to such Company RSU immediately prior to the Effective Time (except to the extent that such terms and conditions conflict with the Jaguar Stock Plan), except that the number of shares of Parent Common Stock issuable under such Parent RSU shall consist of the following: (x) a fixed number (the "*Fixed Number of Shares*") as set forth on *Schedule 2* attached hereto, plus (y) a contingent right to receive additional shares of Parent Common Stock (the "*Contingent Number of Shares*") as set forth in *Schedule 2*. Parent has reserved a sufficient number of shares of Parent Common Stock to provide for the issuance of Parent Common Stock upon vesting of each Parent RSU.

(c) At the Effective Time, each Company Option which is then outstanding and unexercised (other than any Company Option the holders of which shall have agreed to exercise such Company Option for Company Common Stock immediately prior to the Effective Time) shall cease to represent a right to acquire shares of Company Common Stock and shall be converted into and thereafter represent an option to acquire shares of Parent Common Stock which shall be subject to the provisions of the Jaguar Stock Plan, and which shall be issued under the same terms and conditions as were applicable under such Company Option immediately prior to the Effective Time (except to the extent that such terms and conditions conflict with the Jaguar Stock Plan), except that the number of shares of Parent Common Stock shall be as set forth on *Schedule 2* (each, a

Table of Contents

"Parent Option") The exercise price per share of Parent Common Stock subject to any such Parent Option will be as set forth on **Schedule 2**. Notwithstanding the foregoing, if the conversion of an Company Option in accordance with the preceding provisions of this *Section 5.2* would cause the related Parent Option to be treated as the grant of a new stock right for purposes of Section 409A of the Code, such Company Option shall not be converted in accordance with the preceding provisions but shall instead be converted in a manner reasonably acceptable to Parent and Company that would not cause the related Parent Option to be treated as the grant of new stock right for purposes of Section 409A of the Code. For avoidance of doubt, each Parent Option shall be vested to the same extent to which the Company Option for which it was substituted was vested before or as of the Effective Time.

5.3 *Expenses.* Except as otherwise specifically set forth elsewhere in this Agreement, all costs and expenses incurred in connection with this Agreement and the Transactions shall be paid by the party incurring such cost or expense.

5.4 *Public Announcements.* The initial press release with respect to this Agreement and the Transactions shall be a release mutually agreed to by Company and Parent. Thereafter, Company and Parent agree that no public release or other public announcement concerning the Transactions shall be issued by any party prior to the Closing without the prior written consent of the other party (which consent shall not be unreasonably withheld, conditioned or delayed), except as such release or announcement may be required by applicable Law or the rules or regulations of the SEC or a Governmental Entity to which the relevant party is subject, wherever situated, in which case the party required to make the release or announcement shall consult with the other party about, and allow the other party reasonable time to comment on, such release or announcement in advance of such issuance.

5.5 *Conduct of Business by the Company.*

(a) Company covenants and agrees that, between the date of this Agreement and the earlier to occur of the Effective Time and the date, if any, on which this Agreement is terminated pursuant to *Section 10.1* (the "Interim Period"), except to the extent required by Law, as may be agreed in writing by Parent (which consent shall not be unreasonably withheld, delayed or conditioned), as may be expressly required or permitted pursuant to this Agreement, or as set forth in *Section 5.5(a)* or *Section 5.5(b)* of the Company Disclosure Letter, the Company shall (i) conduct its business in all material respects in the ordinary course and in a manner consistent with past practice, and (ii) use its reasonable best efforts to maintain its material assets and properties in their current condition (normal wear and tear and damage caused by casualty or by any reason outside of the Company's control excepted), preserve intact in all material respects its current business organization, goodwill, ongoing businesses and relationships with third parties, keep available the services of its present officers and maintain all Company insurance policies.

(b) Without limiting the foregoing, Company covenants and agrees that, during the Interim Period, except to the extent required by Law, as may be agreed in writing by Parent (which consent shall not be unreasonably withheld, delayed or conditioned), as may be expressly required or permitted pursuant to this Agreement or the Investor Rights Agreement or any one or more of the Settlement Agreements (provided that in no event shall the Company incur additional Indebtedness for borrowed money in excess of an aggregate of \$11,300,000, which Indebtedness shall include convertible debt), or as set forth in *Section 6.1(a)* or *6.1(b)* of the Company Disclosure Letter, the Company shall not do any of the following:

- (i) amend or propose to amend the Company Charter or Company Bylaws;
- (ii) split, combine, reclassify or subdivide any shares of stock or other equity securities or ownership interests of the Company;

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

(iii) declare, set aside or pay any dividend on or make any other distributions (whether in cash, stock, property or otherwise) with respect to shares of capital stock of the Company or other equity securities or ownership interest in the Company;

(iv) redeem, repurchase or otherwise acquire, directly or indirectly, any shares of its capital stock or other equity interests of the Company;

(v) issue, sell, pledge, dispose, encumber or grant any shares of the Company's capital stock, or any options, warrants, convertible securities or other rights of any kind to acquire any shares of the Company's or any of the Company Subsidiaries' capital stock or other equity interests; provided, however, that the Company may issue shares of Company Common Stock upon the vesting of any RSUs or the exercise of any Company Option or Warrant outstanding as of the date of this Agreement;

(vi) acquire or agree to acquire (including by merger, consolidation or acquisition of stock or assets) real property, personal property, corporation, partnership, limited liability company, other business organization or any division or material amount of assets thereof, except acquisitions in the ordinary course of business consistent with past practice;

(vii) sell, pledge, lease, assign, transfer, dispose of or encumber, or effect a deed in lieu of foreclosure with respect to, any property or assets, except (A) pledges and encumbrances on property or assets in the ordinary course of business consistent with past practice, (B) pledges and encumbrances on property or assets that would not be materially adverse to the assets of the Company;

(viii) incur, or create, assume, refinance, replace or prepay any, Indebtedness for borrowed money or issue or amend the terms of any debt securities or assume, guarantee or endorse, or otherwise become responsible (whether directly, contingently or otherwise) for the Indebtedness of any other Person;

(ix) enter into, renew, modify, amend or terminate, or waive, release, compromise or assign any rights or claims under, any Company Material Agreement (or any Contract that, if existing as of the date hereof, would be a Company Material Agreement), other than (A) any termination or renewal in accordance with the terms of any existing Company Material Agreement that occurs automatically without any action by the Company or (B) as may be reasonably necessary to comply with the terms of this Agreement;

(x) waive, release, assign any material rights or claims or make any payment, direct or indirect, of any liability of the Company before the same comes due in accordance with its terms, other than in the ordinary course of business consistent with past practice;

(xi) settle or compromise (A) any legal action, suit or arbitration proceeding, in each case made or pending against the Company including relating to Taxes, and (B) any legal action, suit or proceeding involving any present, former or purported holder or group of holders of the Company Common Stock;

(xii) (A) hire or terminate any officer, director or employee of the Company or promote or appoint any Person to a position of officer or director of the Company, (B) increase in any manner the amount, rate or terms of compensation or benefits of any of its directors, officers or employees, (C) pay or agree to pay any pension, retirement allowance or other compensation or benefit to any director, officer, employee or consultant of the Company or any Company Subsidiary, whether past or present, (D) enter into, adopt, amend or terminate any employment, bonus, severance or retirement contract or other compensation or employee benefits arrangement, (E) grant any awards under any Company Stock Plan, bonus, incentive, performance or other compensation plan or arrangement, or (G) take any action to fund or in

Table of Contents

any other way secure the payment of compensation or benefits under any Company Stock Plan, in each case, other than as required by Law;

(xiii) fail to maintain all financial books and records in all material respects in accordance with GAAP (or any interpretation thereof) or make any material change to its methods of accounting in effect at December 31, 2016, except as required by a change in GAAP (or any interpretation thereof) or in applicable Law, or make any change, other than in the ordinary course of business consistent with past practice, with respect to accounting policies, unless required by GAAP or the SEC;

(xiv) enter into any new line of business;

(xv) except as contemplated in this Agreement, adopt a plan of merger, complete or partial liquidation or resolutions providing for or authorizing such merger, liquidation or a dissolution, consolidation, recapitalization or bankruptcy reorganization; or

(xvi) authorize, or enter into any contract, agreement, commitment or arrangement to do any of the foregoing.

5.6 *Conduct of Business by Parent and Merger Sub.*

(a) Parent covenants and agrees that, during the Interim Period, except to the extent required by Law, as may be agreed in writing by the Company (which consent shall not be unreasonably withheld, delayed or conditioned), as may be expressly required or permitted pursuant to this Agreement, Parent shall not do any of the following:

(i) amend or propose to amend the Parent Charter except as provided or contemplated in this Agreement;

(ii) split, combine, reclassify or subdivide any shares of stock or other equity securities or ownership interests of Parent or Merger Sub;

(iii) declare, set aside or pay any dividend on or make any other distributions (whether in cash, stock, property or otherwise) with respect to shares of capital stock of Parent or other equity securities or ownership interests in Parent;

(iv) redeem, repurchase or otherwise acquire, directly or indirectly, any shares of its capital stock or other equity interests of Parent;

(v) sell, pledge, lease, assign, transfer dispose of or encumber, or effect a deed in lieu of foreclosure with respect to, any property or assets, except pledges and encumbrances on property or assets (A) in the ordinary course of business consistent with past practice or (B) that would not be materially adverse to the assets of Parent on a consolidated basis;

(viii) fail to maintain all financial books and records in all material respects in accordance with GAAP (or any interpretation thereof) or make any material change to its methods of accounting in effect as of the date hereof, except as required by a change in GAAP (or any interpretation thereof) or in applicable Law, or make any change, other than in the ordinary course of business consistent with past practice, with respect to accounting policies, unless required by GAAP or the SEC;

(ix) fail to duly and timely file all material reports and other material documents required to be filed with NASDAQ or any Governmental Entity, subject to extensions permitted by Law or applicable rules and regulations;

(x) adopt a plan of merger, complete or partial liquidation or resolutions providing for or authorizing such merger, liquidation or a dissolution, consolidation, recapitalization or bankruptcy reorganization, except as contemplated in this Agreement except in a manner that would not reasonably be expected to be adverse to Parent or to prevent or impair the ability of Parent to consummate the Merger;

Table of Contents

(xi) except for the issuance of up to \$1,000,000 of Parent Common Stock pursuant to the Aspire Capital Fund Common Stock Purchase Agreement (a "*Permitted Issuance*"), issue, sell, or grant any shares of Parent's capital stock, or any options, warrants, convertible securities or other rights of any kind to acquire any shares of Parent's or any of Parent's Subsidiaries' capital stock or other equity interests; provided, however, that Parent may issue shares of Parent Common Stock upon the vesting of any Parent RSUs or the exercise of any Parent Option or Warrant outstanding as of the date of this Agreement; or

(xii) authorize, or enter into any contract, agreement, commitment or arrangement to do any of the foregoing.

5.7 *Preparation of Form S-4 and Joint Proxy Statement; Stockholder Meetings.*

(a) As promptly as reasonably practicable following the date of this Agreement, (i) the Company and Parent shall jointly prepare and cause to be filed with the SEC the Joint Proxy Statement in preliminary form, and (ii) Parent shall prepare and cause to be filed with the SEC, the Form S-4, which will include the Joint Proxy Statement as a prospectus. Each of the Company and Parent shall use its reasonable best efforts to (x) have the Form S-4 declared effective under the Securities Act as promptly as practicable after such filing, (y) ensure that the Form S-4 complies in all material respects with the applicable provisions of the Exchange Act and the Securities Act, and (z) keep the Form S-4 effective for so long as necessary to complete the Merger. Each of the Company and Parent shall furnish all information concerning itself, its Affiliates and the holders of its capital stock to the other and provide such other assistance as may be reasonably requested in connection with the preparation, filing and distribution of the Form S-4 and Joint Proxy Statement. The Form S-4 and Joint Proxy Statement shall include all information reasonably requested by such other party to be included therein. Each of the Company and Parent shall promptly notify the other upon the receipt of any comments from the SEC or any request from the SEC for amendments or supplements to the Form S-4 or Joint Proxy Statement, and shall, as promptly as practicable after receipt thereof, provide the other with copies of all correspondence between it and its Representatives, on the one hand, and the SEC, on the other hand, and all written comments with respect to the Joint Proxy Statement or the Form S-4 received from the SEC and advise the other party of any oral comments with respect to the Joint Proxy Statement or the Form S-4 received from the SEC. Each of the Company and Parent shall use its reasonable best efforts to respond as promptly as practicable to any comments from the SEC with respect to the Joint Proxy Statement, and Parent shall use its reasonable best efforts to respond as promptly as practicable to any comments from the SEC with respect to the Form S-4. Notwithstanding the foregoing, prior to filing the Form S-4 (or any amendment or supplement thereto) or mailing the Joint Proxy Statement (or any amendment or supplement thereto) or responding to any comments from the SEC with respect thereto, each of the Company and Parent shall cooperate and provide the other a reasonable opportunity to review and comment on such document or response (including the proposed final version of such document or response). Parent shall advise the Company, promptly after it receives notice thereof, of the time of effectiveness of the Form S-4, the issuance of any stop order relating thereto or the suspension of the qualification of the Parent Common Stock issuable in connection with the Merger for offering or sale in any jurisdiction, and Parent and the Company shall use their reasonable best efforts to have any such stop order or suspension lifted, reversed or otherwise terminated. Parent shall also take any other action required to be taken under the Securities Act, the Exchange Act, any applicable foreign or state securities or "blue sky" Laws and the rules and regulations thereunder in connection with the issuance of the Parent Common Stock in the Merger, and the Company shall furnish all information concerning the Company and the holders of the Company Common Stock as may be reasonably requested in connection with any such actions.

Table of Contents

(b) If, at any time prior to the receipt of the Company Stockholder Approval or the Parent Stockholder Approval, any information relating to the Company or Parent, or any of their respective Affiliates, should be discovered by the Company or Parent which, in the reasonable judgment of the Company or Parent, should be set forth in an amendment of, or a supplement to, any of the Form S-4 or the Joint Proxy Statement, so that any of such documents would not include any misstatement of a material fact or omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, the party which discovers such information shall promptly notify the other parties hereto, and the Company and Parent shall cooperate in the prompt filing with the SEC of any necessary amendment of, or supplement to, the Joint Proxy Statement or the Form S-4 and, to the extent required by Law, in disseminating the information contained in such amendment or supplement to stockholders of the Company and the stockholders of Parent. Nothing in this *Section 5.7(b)* shall limit the obligations of any party under *Section 5.7(a)*. For purposes of this *Section 5.7*, any information concerning or related to the Company, its Affiliates or the Company Stockholder Meeting will be deemed to have been provided by the Company, and any information concerning or related to Parent, its Affiliates or the Parent Stockholder Meeting will be deemed to have been provided by Parent.

(c) As promptly as practicable following the date of this Agreement, the Company shall, in accordance with applicable Law and the Company Charter and Company Bylaws, establish a record date for, duly call, give notice of, convene and hold the Company Stockholder Meeting. The Company shall use its reasonable best efforts to cause the Joint Proxy Statement to be mailed to the stockholders of the Company entitled to vote at the Company Stockholder Meeting and to hold the Company Stockholder Meeting as soon as practicable after the Form S-4 is declared effective under the Securities Act. The Company shall, through the Company Board, recommend to its stockholders that they give the Company Stockholder Approval, include such recommendation in the Joint Proxy Statement and solicit and use its reasonable best efforts to obtain the Company Stockholder Approval. Notwithstanding the foregoing provisions of this *Section 5.7(c)*, if, on a date for which the Company Stockholder Meeting is scheduled, the Company has not received proxies representing a sufficient number of shares of Company Common Stock to obtain the Company Stockholder Approval, whether or not a quorum is present, the Company shall have the right to make one or more successive postponements or adjournments of the Company Stockholder Meeting; provided that the Company Stockholder Meeting is not postponed or adjourned to a date that is more than (i) thirty (30) days after the date for which the Company Stockholder Meeting was originally scheduled (excluding any adjournments or postponements required by applicable Law) or (ii) one hundred twenty (120) days after the record date for the Company Stockholder Meeting.

(d) As promptly as practicable following the date of this Agreement, and subject to all regulatory approvals contemplated in *Section 5.7(a)* above, Parent shall, in accordance with applicable Law and the Parent Charter and Parent Bylaws, establish a record date for, duly call, give notice of, convene and hold the Parent Stockholder Meeting. Parent shall use its reasonable best efforts to cause the Joint Proxy Statement to be mailed to the stockholders of Parent entitled to vote at the Parent Stockholder Meeting and to hold the Parent Stockholder Meeting as soon as practicable after the Form S-4 is declared effective under the Securities Act. Parent shall, through the Parent Board, recommend to its stockholders that they give the Parent Stockholder Approval, include such recommendation in the Joint Proxy Statement, and solicit and use its reasonable best efforts to obtain the Parent Stockholder Approval. Notwithstanding the foregoing provisions of this *Section 5.7(d)*, if, on a date for which the Parent Stockholder Meeting is scheduled, Parent has not received proxies representing a sufficient number of shares of Parent Common Stock to obtain the Parent Stockholder Approval, whether or not a quorum is present, Parent shall have the right to make one or more successive postponements or adjournments of the Parent Stockholder Meeting;

Table of Contents

provided that the Parent Stockholder Meeting is not postponed or adjourned to a date that is more than (i) thirty (30) days after the date for which the Parent Stockholder Meeting was originally scheduled (excluding any adjournments or postponements required by applicable Law) or (ii) one hundred twenty (120) days after the record date for the Parent Stockholder Meeting. Nothing contained in this Agreement shall be deemed to relieve Parent of its obligation to submit the issuance of shares of its Parent Common Stock and convertible non-voting common stock in connection with the Transactions to its stockholders for a vote on the approval thereof.

(e) The Company and Parent will use their respective reasonable best efforts to hold the Company Stockholder Meeting and the Parent Stockholder Meeting on the same date and as soon as reasonably practicable after the date of this Agreement.

5.8 *Access to Information; Confidentiality.*

(a) During the Interim Period, to the extent permitted by applicable Law, each of the Company, on the one hand, and the Parent, on the other hand, shall afford to the other and to their respective Representatives reasonable access during normal business hours and upon reasonable advance notice to all of their respective properties, offices, books, contracts, commitments, personnel and records and, during such period, each of the Company and the Parent shall furnish reasonably promptly to the other (i) a copy of each report, schedule, registration statement and other document filed by it during such period pursuant to the requirements of federal or state securities Laws, and (ii) all other information (financial or otherwise) concerning its business, properties and personnel as such other may reasonably request. Notwithstanding the foregoing, neither the Company nor the Parent shall be required by this *Section 5.8* to provide the other party or the Representatives of such other party with access to or to disclose information (w) relating to the consideration, negotiation and performance of this Agreement and related agreements, (x) that is subject to the terms of a confidentiality agreement with a third party entered into prior to the date of this Agreement (provided, however, that the withholding party shall use its reasonable best efforts to obtain the required consent of such third party to such access or disclosure), (y) the disclosure of which would violate any Law or fiduciary duty (provided, however, that the withholding party shall use its reasonable best efforts to make appropriate substitute arrangements to permit reasonable disclosure not in violation of any Law or fiduciary duty) or (z) that is subject to any attorney-client, attorney work product or other legal privilege (provided, however, that the withholding party shall allow for such access or disclosure to the maximum extent that does not result in a loss of any such attorney-client, attorney work product or other legal privilege). Each of the parties hereto will use its reasonable best efforts to minimize any disruption to the businesses of the other parties that may result from the requests for access, data and information hereunder.

(b) Each of the parties hereto will hold, and will cause its Representatives and Affiliates to hold, any nonpublic information, including any information exchanged pursuant to this *Section 5.8*, in confidence to the extent required by and in accordance with, and will otherwise comply with, the terms of any confidentiality agreement.

5.9 *Company Acquisition Proposals.*

(a) Subject to the other provisions of this *Section 5.9*, during the Interim Period, the Company agrees that it shall not authorize and shall use reasonable best efforts to cause its officers and directors, and other Representatives not to, directly or indirectly through another Person, (i) solicit, initiate, knowingly encourage or knowingly facilitate any inquiry, discussion, offer or request that constitutes, or could reasonably be expected to lead to an acquisition of the Company (an "*Inquiry*"), (ii) engage in any discussions or negotiations regarding, or furnish to any Third Party any non-public information in connection with, or knowingly facilitate in any way any effort by, any Third Party in furtherance of any *Inquiry*, (iii) approve or recommend an acquisition

Table of Contents

of the Company, or enter into any letter of intent, memorandum of understanding, agreement in principle, acquisition agreement, merger agreement, share purchase agreement, asset purchase agreement, share exchange agreement, option agreement or other similar definitive agreement providing for or relating to an acquisition of the Company, or (iv) propose or agree to do any of the foregoing.

(b) Nothing contained in this *Section 5.9* or elsewhere in this Agreement shall prohibit the Company or the Company Board, directly or indirectly through its Representatives, from disclosing to the Company's stockholders a position contemplated by Rule 14e-2(a) or Rule 14d-9 promulgated under the Exchange Act or making any disclosure to its stockholders if the Company Board has determined, after consultation with outside legal counsel, that the failure to do so would be inconsistent with applicable Law.

5.10 *Appropriate Action; Consents; Filings.*

(a) Upon the terms and subject to the conditions set forth in this Agreement, Company and Parent shall use its reasonable best efforts to take, or cause to be taken, all actions, and to do, or cause to be done, and to assist and cooperate with the other party in doing, all things necessary, proper or advisable under applicable Law or pursuant to any contract or agreement to consummate and make effective, as promptly as practicable, the Merger and the Transactions, including (i) the taking of all actions necessary to cause the conditions to Closing set forth in *Article VIII* to be satisfied, (ii) the obtaining of all necessary actions or nonactions, waivers, consents and approvals from Governmental Entities or other Persons necessary in connection with the consummation of the Merger and the Transactions and the making of all necessary registrations and filings (including filings with Governmental Entities, if any) and the taking of all reasonable steps as may be necessary to obtain an approval or waiver from, or to avoid an action or proceeding by, any Governmental Entity or other Persons necessary in connection with the consummation of the Merger and the Transactions, (iii) the defending of any lawsuits or other legal proceedings, whether judicial or administrative, challenging this Agreement or the consummation of the Merger or the Transactions, including seeking to have any stay or temporary restraining order entered by any court or other Governmental Entity vacated or reversed, the avoidance of each and every impediment under any antitrust, merger control, competition or trade regulation Law that may be asserted by any Governmental Entity with respect to the Merger so as to enable the Closing to occur as soon as reasonably possible, and (iv) the execution and delivery of any additional instruments necessary to consummate the Merger and the Transactions and to fully carry out the purposes of this Agreement.

(b) In connection with and without limiting the foregoing, Parent and Company shall give any notices to Third Parties, and Parent and Company shall use, and cause each of their respective Affiliates to use, its reasonable best efforts to obtain any Third Party consents that are necessary, proper or advisable to consummate the Merger.

(c) Notwithstanding anything to the contrary in this Agreement, in connection with obtaining any approval or consent from any Person (other than any Governmental Entity) with respect to the Merger, none of the parties hereto, or any of their respective Representatives, shall be obligated to pay or commit to pay to such Person whose approval or consent is being solicited any cash or other consideration, make any accommodation or commitment or incur any liability or other obligation to such Person (unless expressly required by a written agreement that was entered into prior to the date hereof with such Person). The parties shall cooperate with respect to accommodations that may be requested or appropriate to obtain such consents.

Table of Contents

5.11 *Notification of Certain Matters; Transaction Litigation.*

(a) The Company shall give prompt notice to Parent and Parent shall give prompt notice to Company, of any notice or other communication received by such party from any Governmental Entity in connection with this Agreement, the Merger or the Transactions, or from any Person alleging that the consent of such Person is or may be required in connection with the Merger or the Transactions.

(b) The Company shall give prompt notice to the Parent, and the Parent shall give prompt notice to the Company, if (i) any representation or warranty made by it contained in this Agreement becomes untrue or inaccurate such that the applicable closing conditions would reasonably be expected to be incapable of being satisfied during the Interim Period or (ii) it fails to comply with or satisfy in any material respect any covenant, condition or agreement to be complied with or satisfied by it under this Agreement; provided, however, that no such notification shall affect the representations, warranties, covenants or agreements of the parties or the conditions to the obligations of the parties under this Agreement.

5.12 *Directors' and Officers' Indemnification and Insurance.*

(a) From and after the Effective Time, the Surviving Corporation shall provide exculpation, indemnification and advancement of expenses for each former director, officer, employee or agent of Company (each, a "*Former Company DOEA Indemnitee*"), which is at least as favorable in scope and amount to such Former Company DOEA Indemnitee as the exculpation, indemnification and advancement of expenses provided to such Former Company DOEA Indemnitee by the Company immediately prior to the Effective Time in the Company Charter and the Company Bylaws as in effect on the date of this Agreement; provided that such exculpation, indemnification and advancement of expenses covers actions at or prior to the Effective Time, including all of the Transactions.

(b) Without limiting the provisions of *Section 5.12(a)*, during the period commencing as of the Effective Time and ending on the sixth (6th) anniversary of the Effective Time, Parent and the Surviving Corporation shall (and Parent shall cause the Surviving Corporation to) indemnify, defend and hold harmless each Former Company DOEA Indemnitee against and from any costs or expenses (including attorneys' fees), judgments, fines, losses, claims, damages, liabilities and amounts paid in settlement in connection with any Action, whether civil, criminal, administrative or investigative, to the extent such Action arises out of or pertains to (x) any action or omission or alleged action or omission in such Former Company DOEA Indemnitee's capacity as a director, officer, employee or agent of the Company, or (y) this Agreement or any of the Transactions, including the Merger. Notwithstanding anything to the contrary set forth in this Agreement, Parent or the Surviving Corporation (i) shall not be liable for any settlement effected without their prior written consent (which consent shall not be unreasonably withheld, delayed or conditioned) and (ii) shall not have any obligation hereunder to any Former Company DOEA Indemnitee to the extent that a court of competent jurisdiction shall determine in a final and non-appealable order that such indemnification is prohibited by applicable Law, in which case the Former Company DOEA Indemnitee shall promptly refund to Parent or the Surviving Corporation the amount of any expenses which may be advanced.

(c) The Former Company DOEA Indemnitees to whom this *Section 5.12* applies are intended to be third-party beneficiaries of this *Section 5.12*. The provisions of this *Section 5.12* are intended to be for the benefit of each Former Company DOEA Indemnitee and his or her successors, heirs, executors, trustees, fiduciaries, administrators or representatives.

(d) The rights of each Former Company DOEA Indemnitee under this *Section 5.12* shall be in addition to any rights such Person or any employee of the Company may have under the

Table of Contents

Company Charter or the Company Bylaws, or under any applicable Law or under any agreement of any Former Company DOEA Indemnitee. Nothing in this Agreement is intended to, shall be construed to or shall release, waive or impair any rights to directors' and officers' insurance claims under any policy that is or has been in existence with respect to the Company or its officers, directors and employees, it being understood and agreed that the indemnification provided for in this *Section 5.12* is not prior to, or in substitution for, any such claims under any such policies.

5.13 *Section 16 Matters.* Assuming that the Company delivers to Parent, in a timely fashion prior to the Effective Time, all requisite information necessary for Parent and Merger Sub to take the actions contemplated by this *Section 5.13*, the Company, Parent and Merger Sub each shall take all such steps as may be necessary or appropriate to ensure that (a) any dispositions of Company Common Stock (including derivative securities related to such stock) resulting from the Merger and the Transactions by each individual who is subject to the reporting requirements of Section 16(a) of the Exchange Act with respect to the Company immediately prior to the Effective Time are exempt under Rule 16b-3 promulgated under the Exchange Act, and (b) any acquisitions of Parent Common Stock (including derivative securities related to such stock) resulting from the Merger and the Transactions by each individual who may become subject to the reporting requirements of Section 16(a) of the Exchange Act with respect to Parent are exempt under Rule 16b-3 promulgated under the Exchange Act.

5.14 *Stock Exchange Listing.* Parent shall use its reasonable best efforts to cause the shares of Parent Common Stock to be issued pursuant to the Merger to be approved for listing on the NASDAQ, subject to official notice of issuance, prior to the Effective Time.

5.15 *Voting of Shares.* The Company shall vote all shares of Parent Common Stock beneficially owned by it as of the record date for the Parent Stockholder Meeting, if any, in favor of the issuance of shares of Parent Common Stock in connection with the Merger.

5.16 *Termination of Company Stock Plans.* Unless otherwise notified by Parent in writing, prior to the Effective Time, the Company shall take or cause to be taken any and all actions necessary or appropriate to terminate each Company Stock Plan effective no later than immediately prior to the Effective Time.

**ARTICLE VI
INDEMNIFICATION OF PARENT**

6.1 *RSU Indemnitors.* Attached hereto as *Schedule 5* is a schedule (the "*Schedule of RSU Indemnitors*") that sets forth the names of the RSU Indemnitors and the Fixed Number of Shares issuable under the RSUs of each RSU Indemnitor that are subject to the indemnification provisions of this *Article VI*.

6.2 *Indemnification of Parent.* Subject to the terms and conditions of this *Article VI* (including without limitation the limitations set forth in *Section 6.6*), the RSU Indemnitors shall each severally (and not jointly), pro rata based upon each such RSU Indemnitor's pro rata share of the total Fixed Number of Shares listed on the Schedule of RSU Indemnitors, defend and hold harmless Parent, the Surviving Corporation and their respective Representatives, successors and permitted assigns (the "*Parent Indemnitees*"), from and against all Losses asserted against, resulting to, imposed upon, or incurred by any Parent Indemnitee by reason of, arising out of or resulting from:

(a) the inaccuracy or breach of any representation or warranty of the Company contained in or made pursuant to this Agreement (including the Company Disclosure Letter), any schedule or any certificate delivered by Company to Parent pursuant to this Agreement with respect hereto or thereto in connection with the Closing;

(b) the non-fulfillment or breach of any covenant or agreement of the Company contained in this Agreement; and

Table of Contents

- (c) any Excess Dissenting Share Payment made by any Parent Indemnitee.

6.3 *Indemnification Procedures.*

(a) If Parent determines that it or any Parent Indemnitees are entitled to indemnification pursuant to *Section 6.2* (subject to the limitations of *Section 6.6*) or has had notice of a claim or demand made by a third party against any of the Parent Indemnitees, then Parent shall deliver to the Company Representative a written notice (a "*Parent Indemnification Notice*") that complies with this Agreement of a claim for payment of a stated sum. Such Parent Indemnification Notice shall set forth in reasonable detail the factual and legal basis for such claim.

(b) If Parent delivers a Parent Indemnification Notice to the Company Representative and if no Company Response Notice (as defined below) is delivered to Parent by the Company Representative prior to 11:59 p.m. Eastern Time on the 30th day after delivery of such Parent Indemnification Notice to Parent, then the RSU Indemnitors shall promptly pay to the Parent Indemnitees the amount set forth in the Parent Indemnification Notice in cash or, at the election of each RSU Indemnitor, forfeiture of an equivalent dollar amount of Fixed Number of Shares issuable pursuant to the Parent RSUs held by such RSU Indemnitor with an agreed upon value solely for purposes of this Article VI Indemnification of \$0.925 per share (subject to stock splits, combinations, reclassifications, and the like) subject in all cases to the limitations set forth in this Article VI. If Parent delivers a Parent Indemnification Notice to the Company Representative and the Company Representative delivers a Company Response Notice (as defined below) and states in such Company Response Notice that it does not dispute the payment of certain claims set forth in the applicable Parent Indemnification Notice, then the RSU Indemnitors shall promptly pay to the Parent Indemnitees the amount set forth in the Parent Indemnification Notice in the manner set forth above.

(c) If the Company Representative objects to the Parent Indemnification Notice or any part thereof, then prior to 11:59 p.m. Eastern Time on the 30th day after the delivery to the Company Representative of such Parent Indemnification Notice, the Company Representative shall deliver to Parent a written notice (a "*Company Response Notice*") which shall (i) state that it disputes all or some matters under the Parent Indemnification Notice (the "*Company Disputed Matters*") and/or (ii) indicate that the Company Representative is assuming the defense of the matters relating to the Parent Indemnification Notice.

(d) The Company Representative and Parent shall act in good faith to resolve any Company Disputed Matters in accordance with the following procedure:

- (i) Within 30 days after the delivery of a Company Response Notice to Parent pursuant to the preceding paragraph identifying Company Disputed Matters, the Company Representative and Parent shall attempt to resolve the Company Disputed Matters through good faith negotiations.

- (ii) If the Company Disputed Matters are not fully resolved within the 30-day period described in paragraph (i) above, all such Company Disputed Matters shall be submitted to non-binding mediation, which may be done by either Parent or the Company Representative by written notice. The mediation shall be held before one neutral mediator in a location to be agreed by the Company Representative and Parent and administered by a mutually agreeable organization, or if none is agreed upon, the American Arbitration Association ("AAA"), in either case, the mediation shall be governed by the Commercial Mediation Rules of the AAA. The parties shall agree on a locations and a neutral mediator within five days after notice of submission to mediation. If the parties are unable to agree on the location or mediator within that time period, the location and mediator shall be selected by the AAA. Each party shall bear its own costs and expenses incurred in connection with any such mediation, including one-half of the fees of the mediator.

Table of Contents

(iii) If the parties are unable to fully resolve the Company Disputed Matters within 30 days after the Company Disputed Matters are submitted to mediation in accordance with paragraph (ii) above, either Parent or the Company Representative may seek relief from any United States District Court or a state court located in the State of Delaware in accordance with *Section 10.11*.

(e) Within five (5) Business Day after the resolution of a Company Response Notice, the RSU Indemnitors shall make payment in accordance with the resolution of the applicable Company Response Notice, provided that the RSU Indemnitors shall make such payment in the manner set forth in *Section 6.3(b)*.

6.4 Indemnification of Parent Third Party Claims. The indemnification obligations and liabilities under this *Article VI* with respect to actions, proceedings, lawsuits, investigations, demands or other claims brought against Parent by a Person other than Company (a "*Parent Third Party Claim*") shall be subject to the following terms and conditions:

(a) *Defense.* The Company Representative shall have the right, at its option (subject to the limitations set forth in *Section 6.4(b)* below) and at its own expense, by written notice to Parent, to assume the entire control of, subject to the right of Parent to participate (at its expense and with counsel of its choice) in, the defense, compromise or settlement of the Parent Third Party Claim as to which Parent has provided a written notice to the Company Representative (a "*Parent Claim Notice*"), and shall be entitled to appoint a recognized and reputable counsel reasonably acceptable to Parent to be the lead counsel in connection with such defense. If the Company Representative is permitted and elects to assume the defense of a Parent Third Party Claim:

(i) the Company Representative shall diligently and in good faith defend such Parent Third Party Claim and shall keep Parent reasonably informed of the status of such defense; *provided, however,* that in the case of any settlement providing for remedies which are not merely incidental to a primary damage claim or claims for monetary damages, Parent shall have the right to approve any settlement, which approval will not be unreasonably withheld, delayed or conditioned; and

(ii) Parent shall cooperate fully in all respects with the Company Representative in any such defense, compromise or settlement thereof, including, without limitation, the selection of counsel, and Parent shall make available to the Company Representative all pertinent information and documents under its control.

(b) *Limitations of Right to Assume Defense.* The Company Representative shall not be entitled to assume control of such defense and shall pay the fees and expenses of counsel retained by Parent if (i) the Parent Third Party Claim relates to or arises in connection with any criminal proceeding, action, indictment, allegation or investigation; (ii) the Parent Third Party Claim seeks an injunction or equitable relief against Parent which is not merely incidental to a primary damage claim or claims for monetary damages; or (iii) there is a reasonable probability that a Parent Third Party Claim may materially and adversely affect Parent other than as a result of money damages or other money payments.

(c) *Other Limitations.* Failure to give prompt Parent Claim Notice or to provide copies of relevant available documents or to furnish relevant available data shall not constitute a defense (in whole or in part) to any Parent Third Party Claim by Parent pursuant to this *Article VI* and shall not affect the Company Representative's duty or obligations under this *Article VI*, except to the extent (and only to the extent that) such failure shall have actually materially prejudiced the ability of the Company Representative to defend against or reduce its liability or caused or increased such liability or otherwise caused the damages for which the Parent is seeking indemnification to be greater than such damages would have been had Parent given the Company Representative prompt

Table of Contents

notice hereunder. So long as the Company Representative is defending any such action actively and in good faith, Parent shall not settle such action. Parent shall make available to the Company Representative all relevant records and other relevant materials required by him and in the possession or under the control of Parent, for the use of the Company Representative and its representatives in defending any such action, and shall in other respects give reasonable cooperation in such defense.

(d) *Failure to Defend.* If the Company Representative, promptly after receiving a Parent Claim Notice, fails to defend such Parent Third Party Claim actively or in good faith, Parent, at the reasonable cost and expense of the RSU Indemnitors, will (upon further written notice) have the right to undertake the defense, compromise or settlement of such Parent Third Party Claim as it may determine in its reasonable discretion, provided that the Company Representative shall have the right to approve any settlement, which approval will not be unreasonably withheld, delayed or conditioned.

(e) *Parent's Rights.* Anything in this *Section 6.4* to the contrary notwithstanding, the Company Representative shall not, without the written consent of Parent, settle or compromise any action or consent to the entry of any judgment which does not include as an unconditional term thereof the giving by the claimant or the plaintiff to Parent of a full and unconditional release from all liability and obligation in respect of such action without any payment by Parent.

(f) *Company Representative Consent.* Unless the Company Representative has consented to a settlement of a Parent Third Party Claim, the amount of the settlement shall not be a binding determination of the amount of the Loss and such amount shall be determined in accordance with the provisions of this Agreement.

6.5 *Insurance Effect.* To the extent that any Losses that are subject to indemnification pursuant to this *Article VI* are covered by insurance paid for by Company or Parent prior to or after the Closing, Parent shall use commercially reasonable efforts to obtain the maximum recovery under such insurance; provided, that Parent shall nevertheless be entitled to bring a claim for indemnification under this *Article VI* in respect of such Losses and the time limitations set forth in *Section 6.6* for bringing a claim of indemnification under this Agreement shall be tolled during the pendency of such insurance claim. The existence of a claim by Parent for monies from an insurer or against a third party in respect of any Loss shall not, however, delay any payment pursuant to the indemnification provisions contained herein and otherwise determined to be due and owing hereunder. If Parent has received the payment required by this Agreement in respect of any Loss and later receives proceeds from insurance in respect of such Loss, then it shall hold such proceeds or other amounts in trust for the benefit of the RSU Indemnitors and shall pay to the RSU Indemnitors, as promptly as practicable after receipt, a sum equal to the amount of such proceeds or other amount received, up to the aggregate amount of any payments received from the RSU Indemnitors pursuant to this Agreement in respect of such Loss. Notwithstanding any other provisions of this Agreement, it is the intention of the parties that no insurer or any other third party shall be (a) entitled to a benefit it would not be entitled to receive in the absence of the foregoing indemnification provisions, or (b) relieved of the responsibility to pay any claims for which it is obligated.

6.6 *Limitations on Indemnification Survival; Time Limitation.* The representations, warranties, covenants and agreements in this Agreement or in any writing delivered by Company to Parent in connection with this Agreement shall survive for a period of twelve (12) months following the Closing Date (the "*Survival Period*").

(a) Any indemnification claim made by Parent prior to the termination of the Survival Period shall be preserved despite the subsequent termination of the Survival Period and any claim set forth in a Parent Indemnification Notice sent prior to the expiration of the Survival Period shall survive until final resolution thereof. Except as set forth in the immediately preceding sentence, no

Table of Contents

claim for indemnification under this *Article VI* shall be brought after the end of the Survival Period.

(b) *Minimum Amount Limitation.* The Parent Indemnitees shall be entitled to indemnification for any Losses with respect to the matters contained in *Section 6.2 (a)*, only to the extent that the aggregate Losses with respect thereto exceed an amount equal to \$25,000 (the "*Basket Amount*"), at which point the Parent Indemnitees shall be permitted to recover only such Losses in excess of the Basket Amount.

(c) *Aggregate Amount Limitation.* The aggregate liability for Losses pursuant to *Section 6.1(a)* shall not in any event exceed the product of (i) the total number of shares listed on the Schedule of RSU Indemnitors set forth on *Schedule 5*, multiplied by (ii) \$0.925.

6.7 *Exclusive Remedy.* Parent, on behalf of itself and the other Parent Indemnitees, hereby acknowledges and agrees that, from and after the Closing, the sole and exclusive remedy of the Parent Indemnitees with respect to any and all claims for money damages arising out of or relating to this Agreement shall be pursuant and subject to the requirements of the indemnification provisions set forth in this *Article VI*. Notwithstanding any of the foregoing, nothing contained in this *Article VI* shall in any way impair, modify or otherwise limit a Parent Indemnitee's right to bring any claim, demand or suit against an RSU Indemnitor based upon the Company's actual fraud or intentional or willful misrepresentation or omission, it being understood that a mere breach of a representation and warranty, without intentional or willful misrepresentation or omission, does not constitute fraud.

6.8 *Adjustment to Merger Consideration.* Amounts paid for indemnification under *Article VI* shall be deemed to be an adjustment to the value of the Merger Shares to the extent they are issued by Parent as a result of the Merger, except as otherwise required by Law.

6.9 *Company Representative Capacities.* The parties acknowledge that the Company Representative's obligations under this *Article VI* are solely as a representative of Company's stockholders with respect to the obligations to indemnify the Parent Indemnitees under this *Article VI* and that the Company Representative shall have no personal liability or responsibility for any expenses incurred by him in such capacity and that all payments to Parent as a result of such indemnification obligations shall be made solely from, the Company Indemnitees.

**ARTICLE VII
INDEMNIFICATION OF COMPANY INDEMNITEES**

7.1 *Indemnification of Company Indemnitees.* Subject to the terms and conditions of this *Article VII* (including without limitation the limitations set forth in *Section 7.5*, Parent shall indemnify, defend and hold harmless Persons who receive the Contingent Right from Parent upon consummation of the Merger (the "*Company Indemnitees*"), from and against all Losses asserted against, resulting to, imposed upon, or incurred by any Company Indemnitee by reason of, arising out of or resulting from:

(a) the inaccuracy or breach of any representation or warranty of Parent or Merger Sub contained in or made pursuant to this Agreement (including the Parent Disclosure Letter, any schedule or any certificate delivered by Parent or Merger Sub to Company pursuant to this Agreement with respect hereto or thereto in connection with the Closing; and

(b) the non-fulfillment or breach of any covenant or agreement of Parent or Merger Sub contained in this Agreement.

7.2 *Indemnification Procedures.*

(a) If the Company Representative determines that the Company Indemnitees are entitled to indemnification pursuant to *Section 7.1* (subject to the limitations of *Section 7.5*) or has had notice of a claim or demand made by a third party against any of the Company Indemnitees, then the

Table of Contents

Company Representative shall deliver to Parent a written notice (a "*Company Indemnification Notice*") that complies with this Agreement of a claim for payment of a stated sum. Such Company Indemnification Notice shall be signed by the Company Representative and set forth in reasonable detail the factual and legal basis for such claim.

(b) If the Company Representative delivers a Company Indemnification Notice to Parent and if no Parent Response Notice (as defined below) is delivered to the Company Representative prior to 11:59 p.m. Eastern Time on the 30th day after delivery of such Company Indemnification Notice to Parent, then Parent shall promptly pay to the Company Indemnitees the amount set forth in the Company Indemnification Notice. If the Company Representative delivers a Company Indemnification Notice to Parent and Parent delivers a Parent Response Notice (as defined below) and states in such Parent Response Notice that it does not dispute the payment of certain claims and amounts set forth in the applicable Company Indemnification Notice, then Parent shall promptly pay to the Company Indemnitees the amount set forth in the Company Indemnification Notice.

(c) If Parent objects to the Company Indemnification Notice or any part thereof, then prior to 11:59 p.m. Eastern Time on the 30th day after the delivery to Parent of such Company Indemnification Notice, Parent shall deliver to the Company Representative a written notice (a "*Parent Response Notice*") which shall (i) state that it disputes all or some matters under the Company Indemnification Notice (the "*Parent Disputed Matters*") and/or (ii) indicate whether Parent is assuming the defense of the matters relating to the Company Indemnification Notice.

(d) The Company Representative and Parent shall act in good faith to resolve any Parent Disputed Matters in accordance with the following procedure:

(i) Within 30 days after the delivery of a Parent Response Notice to the Company Representative pursuant to the preceding paragraph identifying Parent Disputed Matters, the Company Representative and Parent shall attempt to resolve the Parent Disputed Matters through good faith negotiations.

(ii) If the Parent Disputed Matters are not fully resolved within the 30-day period described in paragraph (i) above, all such Parent Disputed Matters shall be submitted to non-binding mediation, which may be done by either Parent or the Company Representative by written notice. The mediation shall be held before one neutral mediator in a location to be agreed by the Company Representative and Parent and administered by a mutually agreeable organization, or if none is agreed upon, the AAA, in either case, the mediation shall be governed by the Commercial Mediation Rules of the AAA. The parties shall agree on a locations and a neutral mediator within five days after notice of submission to mediation. If the parties are unable to agree on the location or mediator within that time period, the location and mediator shall be selected by the AAA. Each party shall bear its own costs and expenses incurred in connection with any such mediation, including one-half of the fees of the mediator.

(iii) If the parties are unable to fully resolve the Parent Disputed Matters within 30 days after the Parent Disputed Matters are submitted to mediation in accordance with paragraph (ii) above, either Parent or the Company Representative may seek relief from any United States District Court or a state court located in the State of Delaware in accordance with *Section 10.11*.

(e) Within five (5) Business Days after the resolution of a Parent Response Notice, Parent shall make any such payment pro rata to the Company Indemnitees in accordance with the resolution of the applicable Parent Response Notice.

Table of Contents

7.3 *Indemnification of Company Third Party Claims.* The indemnification obligations and liabilities under this *Article VII* with respect to actions, proceedings, lawsuits, investigations, demands or other claims brought against any of the Company Indemnitees by a Person other than Parent (a "*Company Third Party Claim*") shall be subject to the following terms and conditions:

(a) *Defense.* Parent shall have the right, at its option (subject to the limitations set forth in *Section 7.3(b)* below) and at its own expense, by written notice to the Company Representative, to assume the entire control of, subject to the right of the Company Representative to participate (at its expense and with counsel of its choice) in, the defense, compromise or settlement of the Company Third Party Claim as to which the Company Representative has provided a written notice to Parent (a "*Company Claim Notice*"), and shall be entitled to appoint a recognized and reputable counsel reasonably acceptable to the Company Representative to be the lead counsel in connection with such defense. If Parent is permitted and elects to assume the defense of a Company Third Party Claim:

(i) Parent shall diligently and in good faith defend such Company Third Party Claim and shall keep the Company Representative reasonably informed of the status of such defense; *provided, however,* that in the case of any settlement providing for remedies which are not merely incidental to a primary damage claim or claims for monetary damages, the Company Representative shall have the right to approve any settlement, which approval will not be unreasonably withheld, delayed or conditioned; and

(ii) the Company Representative shall cooperate fully in all respects with Parent in any such defense, compromise or settlement thereof, including, without limitation, the selection of counsel, and the Company Representative shall make available to Parent all pertinent information and documents under its control.

(b) *Limitations of Right to Assume Defense.* Parent shall not be entitled to assume control of such defense and shall pay the fees and expenses of counsel retained by the Company Representative if (i) the Company Third Party Claim relates to or arises in connection with any criminal proceeding, action, indictment, allegation or investigation; (ii) the Company Third Party Claim seeks an injunction or equitable relief against a Company Indemnitee which is not merely incidental to a primary damage claim or claims for monetary damages; or (iii) there is a reasonable probability that a Company Third Party Claim may materially and adversely affect a Company Indemnitee other than as a result of money damages or other money payments.

(c) *Other Limitations.* Failure to give a prompt Company Claim Notice or to provide copies of relevant available documents or to furnish relevant available data shall not constitute a defense (in whole or in part) to any Company Third Party Claim by the Company Representative pursuant to this *Article VII*, and shall not affect Parent's duty or obligations under this *Article VII*, except to the extent (and only to the extent that) such failure shall have actually materially prejudiced the ability of Parent to defend against or reduce its liability or caused or increased such liability or otherwise caused the damages for which Parent is obligated to be greater than such damages would have been had the Company Representative given Parent prompt notice hereunder. So long as Parent is defending any such action actively and in good faith, the Company Representative and Parent each shall not settle, and the Company Representative shall make reasonable efforts to prevent a Company Indemnitee from settling, such action. The Company Representative shall make available to Parent all relevant records and other relevant materials required by it and in the possession or under the control of the Company Representative, for the use of Parent and its representatives in defending any such action, and shall in other respects give reasonable cooperation in such defense.

(d) *Failure to Defend.* If Parent, promptly after receiving a Company Claim Notice, fails to defend such Company Third Party Claim actively or in good faith, the Company Representative, at

Table of Contents

the reasonable cost and expense of Parent, will (upon further written notice) have the right to undertake the defense, compromise or settlement of such Company Third Party Claim as he may determine in his reasonable discretion, provided that Parent shall have the right to approve any settlement, which approval will not be unreasonably withheld, delayed or conditioned.

(e) *Company Indemnitees' Rights.* Anything in this *Section 7.3* to the contrary notwithstanding, Parent shall not, without the written consent of the Company Representative, settle or compromise any action or consent to the entry of any judgment which does not include as an unconditional term thereof the giving by the claimant or the plaintiff to the Company Indemnitees of a full and unconditional release from all liability and obligation in respect of such action without any payment by Company Indemnitees.

(f) *Parent.* Unless Parent has consented to a settlement of a Company Third Party Claim, the amount of the settlement shall not be a binding determination of the amount of the Loss and such amount shall be determined in accordance with the provisions of this Agreement.

7.4 Insurance Effect. To the extent that any Losses that are subject to indemnification pursuant to this *Article VII* are covered by insurance paid for by Company or Parent prior to or after the Closing, the Company Representative shall use commercially reasonable efforts to obtain the maximum recovery under such insurance; provided, that the Company Representative shall nevertheless be entitled to bring a claim for indemnification under this *Article VII* in respect of such Losses and the time limitations set forth in *Section 7.5* for bringing a claim of indemnification under this Agreement shall be tolled during the pendency of such insurance claim. The existence of a claim by the Company Representative and/or Company Indemnitee for monies from an insurer or against a third party in respect of any Loss shall not, however, delay any payment pursuant to the indemnification provisions contained herein and otherwise determined to be due and owing by Parent. If the Company Representative or Company Indemnitees has or have received the payment required by this Agreement from Parent in respect of any Loss and later they receive proceeds from insurance in respect of such Loss, then the Company Representative or the Company Indemnitees, as the case may be, shall hold such proceeds or other amounts in trust for the benefit of Parent and shall pay to Parent, as promptly as practicable after receipt, a sum equal to the amount of such proceeds or other amount received, up to the aggregate amount of any payments received from Parent pursuant to this Agreement in respect of such Loss. Notwithstanding any other provisions of this Agreement, it is the intention of the parties that no insurer or any other third party shall be (i) entitled to a benefit it would not be entitled to receive in the absence of the foregoing indemnification provisions, or (ii) relieved of the responsibility to pay any claims for which it is obligated.

7.5 Limitations on Indemnification.

(a) *Survival; Time Limitation.* The representations, warranties, covenants and agreements in this Agreement or in any writing delivered by Parent to Company in connection with this Agreement shall survive the Closing for the Survival Period.

(b) Any indemnification claim made by the Company Representative prior to the termination of the Survival Period shall be preserved despite the subsequent termination of the Survival Period and any claim set forth in a Company Claim Notice sent prior to the expiration of the Survival Period shall survive until final resolution thereof. Except as set forth in the immediately preceding sentence, no claim for indemnification under this *Article VII* shall be brought after the end of the Survival Period.

(c) *Minimum Amount Limitation.* The Company Indemnitees shall be entitled to indemnification for any Losses with respect to the matters contained in *Section 7.1(a)*, only to the extent that the aggregate Losses with respect thereto exceed the Basket Amount, at which point the Company Indemnitees shall be permitted to recover only such Losses in excess of the Basket Amount.

Table of Contents

(d) *Aggregate Amount Limitation.* The aggregate liability for Losses pursuant to *Section 7.1(a)* shall not in any event exceed the amount set forth in *Section 6.6(c)*.

7.6 Exclusive Remedy. Company, on behalf of itself and the other Company Indemnitees, hereby acknowledges and agrees that, from and after the Closing, the sole remedy of the Company Indemnitees with respect to any and all claims for money damages arising out of or relating to this Agreement shall be pursuant and subject to the requirements of the indemnification provisions set forth in this *Article VII*. Notwithstanding any of the foregoing, nothing contained in this *Article VII* shall in any way impair, modify or otherwise limit a Company Indemnitee's right to bring any claim, demand or suit against the other party based upon such other party's actual fraud or intentional or willful misrepresentation or omission, it being understood that a mere breach of a representation and warranty, without intentional or willful misrepresentation or omission, does not constitute fraud.

7.7 Adjustment to Merger Consideration. Amounts paid for indemnification under *Article VII* shall be deemed to be an adjustment to the value of the Merger Shares to the extent they are issued by Parent as a result of the Merger, except as otherwise required by Law.

7.8 Company Representative. The parties acknowledge that all actions to be taken by the Company Indemnitees pursuant to this *Article VII* shall be taken on their behalf by the Company Representative in accordance with the provisions of this Agreement.

**ARTICLE VIII
CONDITIONS**

8.1 Conditions to the Obligations of Each Party. The respective obligations of each party to effect the Merger and to consummate the Transactions shall be subject to the satisfaction or (to the extent permitted by Law) waiver by each of the parties, at or prior to the Effective Time, of the following conditions:

- (a) *Stockholder Approvals.* Each of the Company Stockholder Approval and the Parent Stockholder Approval shall have been obtained.
- (b) *No Restraints.* No Law, Order (whether temporary, preliminary or permanent) or other legal restraint or prohibition entered, enacted, promulgated, enforced or issued by any Governmental Entity of competent jurisdiction shall be in effect which prohibits, makes illegal, enjoins, or otherwise restricts, prevents or prohibits the consummation of the Merger.
- (c) *Form S-4.* The Form S-4 shall have been declared effective by the SEC under the Securities Act and no stop order suspending the effectiveness of the Form S-4 shall have been issued by the SEC and no proceedings for that purpose shall have been initiated or threatened by the SEC that have not been withdrawn.
- (d) *Listing.* The shares of Parent Common Stock to be issued pursuant to or in connection with the Merger shall have been authorized for listing on the NASDAQ, subject to official notice of issuance.
- (e) *Certificate of Incorporation.* Parent shall have filed the Amended and Restated Certificate of Incorporation in form and substance attached hereto as *Exhibit A* with the Delaware Secretary of State.

8.2 Conditions to the Obligations of Parent and Merger Sub. The obligation of Parent to effect the Merger and to consummate the Transactions are subject to the satisfaction or (to the extent permitted by Law) waiver by Parent, at or prior to the Effective Time, of the following additional conditions:

- (a) *Representations and Warranties.* (i) The representations and warranties set forth in Section 3.1 (Organization and Qualification; Subsidiaries), Section 3.2(a) (Capital Structure),

Table of Contents

Section 3.3 (Authority), Section 3.20 (Takeover Statutes), and Section 3.19 (Brokers) shall be true and correct in all material respects as of the date of this Agreement and as of the Effective Time, as though made as of the Effective Time, and (ii) each of the other representations and warranties of the Company contained in this Agreement shall be true and correct as of the date of this Agreement and as of the Effective Time, as though made as of the Effective Time, except (x) in each case, representations and warranties that are made as of a specific date shall be true and correct only on and as of such date, and (y) in the case of clause (ii) where the failure of such representations or warranties to be true and correct (without giving effect to any materiality or "Company Material Adverse Effect" qualifications set forth therein) does not have, and would not reasonably be expected to have, individually or in the aggregate, a Company Material Adverse Effect.

(b) Agreements and Covenants. The Company shall have performed or complied in all material respects with all agreements and covenants required by this Agreement to be performed or complied with by it on or prior to the Closing Date.

(c) Officer's Certificate. The Company shall have delivered to Parent a certificate, dated the date of the Closing and signed by its chief executive officer or another senior officer on behalf of the Company, certifying to the effect that the conditions set forth in Section 8.2(a) and Section 8.2(b) have been satisfied.

(d) Absence of Material Adverse Effect. Since the date of this Agreement, there shall not have been any event, change or occurrence that, individually or in the aggregate, has had or would reasonably be expected to have a Company Material Adverse Effect.

(e) Nantucket and the Escrow Agent shall have executed the Escrow Agreement.

(f) The Company shall have executed and delivered to Parent a signed copy of each of the Settlement Agreements, in each case countersigned by the applicable existing creditors of the Company.

(g) The Company shall have delivered to Parent a copy of the RSU Agreement of each RSU Indemnitor, in each case signed by the applicable RSU Indemnitor.

(h) Except (i) as otherwise provided in this Agreement, and (ii) for trade payables and other unsecured Indebtedness (other than convertible debt) and/or other liabilities to existing creditors, exclusive of Merger transaction expenses, that do not exceed in the aggregate \$6,200,000, there shall be no Liens or Indebtedness outstanding or any commitment or agreement to issue such Liens or Indebtedness (or claims therefor) in existence as of the Effective Time, except as set forth in Section 3.5(e) of the Company Disclosure Letter.

(i) The Company shall have no less than \$500,000 in available cash.

(j) The Company's trade payables and other unsecured Indebtedness (other than convertible debt) and/or other liabilities to existing creditors, exclusive of Merger transaction expenses, shall not exceed in the aggregate \$6,200,000.

(k) The receipt of any waivers reasonably requested by the Kingdon Purchasers under the Kingdon NPA in respect of the transactions contemplated by this Agreement.

8.3 *Conditions to the Obligations of the Company.* The obligations of the Company to effect the Merger and to consummate the Transactions are subject to the satisfaction or (to the extent permitted by Law) waiver by the Company, at or prior to the Effective Time, of the following additional conditions:

(a) Representations and Warranties. (i) The representations and warranties set forth in Section 4.1 (Organization and Qualification; Subsidiaries), Section 4.2 (Capital stock of Parent),

Table of Contents

Section 4.3 (Authority), Section 5.20 (Vote Required), Section 4.16 (Brokers); and Section 4.17 (Takeover Statutes) shall be true and correct in all material respects as of the date of this Agreement and as of the Effective Time, as though made as of the Effective Time, and (ii) each of the other representations and warranties of Parent and Merger Sub contained in this Agreement shall be true and correct as of the date of this Agreement and as of the Effective Time, as though made as of the Effective Time, except (x) in each case, representations and warranties that are made as of a specific date shall be true and correct only on and as of such date, and (y) in the case of clause (ii) where the failure of such representations or warranties to be true and correct (without giving effect to any materiality or "Parent Material Adverse Effect" qualifications set forth therein) does not have, and would not reasonably be expected to have, individually or in the aggregate, a Parent Material Adverse Effect.

(b) Agreements and Covenants. Parent and Merger Sub shall have performed or complied in all material respects with all agreements and covenants required by this Agreement to be performed or complied with by them on or prior to the Closing Date.

(c) Parent and Nantucket shall have executed the Investor Rights Agreement.

(d) Parent and Salix shall have executed a written letter agreement in the form attached as Schedule 4.8(c) of the Salix/Napo Settlement Agreement.

(e) Officer's Certificate. Parent shall have delivered to the Company a certificate, dated the date of the Closing and signed by its chief executive officer or another senior officer on behalf of Parent, certifying to the effect that the conditions set forth in Section 8.3(a) and Section 8.3(b) have been satisfied.

(f) Absence of Material Adverse Effect. Since the date of this Agreement, there shall not have been any event, change or occurrence that, individually or in the aggregate, has had or would reasonably be expected to have a Parent Material Adverse Effect.

**ARTICLE IX
DEFINED TERMS**

9.1 *Definitions.* For purposes of this Agreement, the following terms will have the following meanings when used herein with initial capital letters:

"*Action*" means any claim, action, suit, arbitration, inquiry, proceeding or investigation by or before any Governmental Entity.

"*Affiliate*" as applied to any Person, means any other Person directly or indirectly controlling, controlled by, or under common control with, that Person; for purposes of this definition, "control" (including, with correlative meanings, the terms "controlling," "controlled by" and "under common control with"), as applied to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of that Person, whether through the ownership of voting securities, by Contract or otherwise. "*Business Day*" means a day other than a Saturday, Sunday or any day on which banks located in the State of New York are authorized or obligated to close. For the avoidance of doubt, no Person that is a lender or creditor of any party hereto shall be deemed to be an Affiliate of such party by virtue of being a lender or creditor to such party.

"*Binding Agreement*" means that certain Binding Agreement of Terms for Jaguar Animal Health, Inc. Acquisition of Napo Pharmaceuticals, Inc. dated February 8, 2017 executed by Parent and the Company.

"*Code*" means the Internal Revenue Code of 1986, as amended.

Table of Contents

"*Company Board*" means the Board of Directors of the Company.

"*Company Licensed Intellectual Property Rights*" means any Licensed Intellectual Property Rights of Company.

"*Company Material Adverse Effect*" means a Material Adverse Effect on Company.

"*Company Material Agreements*" means each Contract to which Company is a party or subject to or by which its assets are bound which: (a) provides for obligations, payments, Liabilities, consideration, performance of services or the delivery of goods to or by such party of any amount or value reasonably expected to be in excess of \$50,000 in any annual period; (b) contains covenants limiting the freedom of such party to engage in any line of business in any geographic area or to compete with any Person; (c) is an employment, retention or severance contract or indemnification contract, or a consulting or non-compete agreement, applicable to any employee of or consultant to such party whose annual total compensation exceeds \$120,000 or any director of such party; (d) relates to, or is evidence of, or is a guarantee of, or provides security for, indebtedness (whether incurred, assumed, guaranteed or secured by any asset of such party); (e) is a letter of credit, bond or similar arrangement running to the account of, or for the benefit of, such party; (f) is a joint venture or partnership contract or a limited liability company operating agreement; (g) is entered into with, or otherwise relates to, any Affiliate, officer or director or their family members of such party; (h) provides for the payment of cash or other compensation or benefits upon the Merger and the consummation of the Transactions; (i) relates to any loan to any directors, officers or Affiliates of such party; or (j) is otherwise material to the operations and business prospects of such party.

"*Company Owned Intellectual Property Rights*" means any Intellectual Property Rights owned by or registered to Company.

"*Company Registered Intellectual Property Rights*" means any Registered Intellectual Property Rights included in Company Owned Intellectual Property Rights.

"*Company RSU*" means an RSU issued by the Company.

"*Company Stakeholders*" means those Persons to be issued (i) shares of Parent Common Stock and/or convertible non-voting common stock of Parent and/or (ii) Parent Warrants, Parent RSUs and/or Parent Options pursuant to this Agreement or any of the Transaction Documents.

"*Company Stock Plan*" means the Napo 2006 Equity Incentive Plan.

"*Company Stockholder Approval*" means the adoption and approval of this Agreement, the Merger and the Transactions by the affirmative vote of the holders of more than fifty percent (50%) of the issued and outstanding shares of Company Common Stock entitled to vote thereon.

"*Company Stockholders Meeting*" means the meeting of the stockholders of the Company that is called for the purpose of obtaining Company Stockholder Approval, all as set forth in Section 5.7(c).

"*Contingent Right Holder*" means a Company Stockholder, and "*Contingent Right Holders*" means the Company Stockholders.

"*Contract*" means any contract, agreement, license, lease, guaranty, indenture, sales or purchase order or other legally binding commitment in the nature of a contract (whether or not written) to which a Person is a party.

"*Derivative Security*" means any option, warrant, equity security, equity-linked security, RSU, appreciation rights, phantom equity, or similar ownership interests, calls, rights (including preemptive rights), Contracts, commitments or agreements of any character to which the specified Person is a party or by which either is bound obligating such Person to issue, deliver or sell, or cause to be issued, delivered or sold, or repurchase, redeem or otherwise acquire, or cause the repurchase, redemption or

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

acquisition of, or deliver cash or other consideration with respect to, any shares of capital stock or similar ownership interests or equity-linked securities of such Person or obligating such Person to grant, extend, accelerate the vesting of or enter into any such subscription, option, warrant, equity security, equity-linked security, RSU, appreciation rights, call, right, commitment or agreement.

"*DOL*" means the United States Department of Labor.

"*Environmental Claim*" means any and all administrative, regulatory or judicial Legal Actions alleging Liability arising out of or resulting from: (1) the presence or Release into the environment of any Hazardous Substance at the Company Leased Real Estate or Parent Leased Real Estate, as applicable; or (2) any violation of Environmental Law.

"*Environmental Laws*" means all federal, state or local statutes, laws, regulations, judgments and orders in effect on the Effective Time and relating to protection of human health or the environment, including laws and regulations relating to Releases or threatened Releases of Hazardous Substances, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Substances.

"*Environmental Permits*" means all governmental licenses, permits, registrations and government approvals issued pursuant to Environmental Law.

"*Escrow Account*" has the meaning ascribed to it in the Investor Rights Agreement.

"*Escrow Agent*" has the meaning ascribed to it in the Investor Rights Agreement.

"*Escrow Agreement*" means that certain Escrow Agreement by and among Parent, Nantucket and Citibank, National Association, as Escrow Agent, executed concurrently with the Closing.

"*Form S-4*" means the registration statement on Form S-4 to be filed with the SEC by Parent registering the public offering and sale of Parent Common Stock to all Company Stockholders and the existing creditors of the Company in the Transactions, including all shares of Parent Common Stock underlying the Contingent Rights to be issued in exchange for all shares of Company Common Stock in the Merger and all shares of Parent Common Stock and the shares of Parent Common Stock underlying the convertible non-voting common stock to be issued to the existing creditors of the Company in the Debt Exchange, as said registration statement may be amended prior to the time it is declared effective by the SEC.

"*Hazardous Substances*" means any chemicals, materials or substances which are defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "extremely hazardous wastes," "restricted hazardous wastes," "toxic substances," "toxic pollutants" or similar terms under any Environmental Law.

"*Hurdle*" has the meaning ascribed to it in the Investor Rights Agreement.

"*Indebtedness*" means, without duplication to current liabilities, all: (i) obligations for borrowed money (including any unpaid principal, premium, accrued and unpaid interest, prepayment penalties, commitment and other fees, reimbursements, indemnities and all other amounts payable in connection therewith); (ii) liabilities evidenced by bonds, debentures, notes, or other similar instruments or debt securities; (iii) obligations, contingent or otherwise, in respect of any letters of credit or bankers' acceptances (to the extent drawn), sureties, performance bonds, guaranties, endorsements and other similar obligations, whether secured or not, in respect of the obligations of other Persons; (iv) obligations (including accrued interest) without duplication under a lease agreement that would be capitalized pursuant to GAAP and (v) the deferred purchase price of property or services (excluding earn-out obligations which shall not be deemed Indebtedness under this Agreement). For purposes of calculating Indebtedness, all interest, prepayment penalties, premiums, fees and expenses (if any) and

Table of Contents

other amounts which would be payable if Indebtedness were paid in full at the Closing shall be treated as Indebtedness.

"*Intellectual Property Rights*" means all worldwide (a) inventions, whether or not patentable, (b) patents and patent applications, and any reissue, continuation, continuation-in-part, division, extension or reexamination thereof, and any application that claims priority to any of the foregoing in this subpart (b), (c) trademarks, trademark applications, service marks, service mark applications, trade dress, logos, Internet domain names and trade names, whether or not registered, and all goodwill associated therewith, (d) rights of publicity and other rights to use the names and likeness of individuals, (e) copyrights and related rights, whether or not registered, (f) computer software, data, databases, files, and documentation and other materials related thereto, (g) trade secrets and all confidential, proprietary, technical, technological, industrial, business processes and business information, (h) know how, (i) all rights in any of the foregoing provided by bilateral or international treaties or conventions, and (j) all rights to sue or recover and retain damages and costs and attorneys' fees for past, present and future infringement or misappropriation of any of the foregoing.

"*Investor Rights Agreement*" means that certain Investor Rights Agreement between Parent and Nantucket executed concurrently with this Agreement.

"*Invesco Commitment Letter*" means that certain letter dated February 21, 2017 between Parent and Invesco Asset Management Limited regarding the commitment of the investors named therein to purchase \$3,000,000 of common stock of Parent simultaneously with the consummation of the Merger.

"*IRS*" means the United States Internal Revenue Service.

"*Joint Proxy Statement*" means the joint proxy statement/prospectus to be sent to the holders of the Company Common Stock in connection with the Company Stockholders Meeting and to the holders of Parent Common Stock in connection with the Parent Stockholder Meeting.

"*Kingdon NPA*" has the meaning ascribed to it in the definition of "*Note Purchase Agreements*" in this Section 9.1.

"*Kingdon Purchasers*" has the meaning ascribed to it in the definition of "*Note Purchase Agreements*" in this Section 9.1.

"*Knowledge*" means, with respect to Company, the actual Knowledge after reasonable enquiry of Lisa Conte and Charles Thompson, and with respect to Parent, the actual Knowledge after reasonable enquiry of Lisa Conte and Karen Wright.

"*Law*" means any federal, state, local (statutory, common or otherwise), municipal, foreign or international, multinational or other law, statute, constitution, treaty, principle of common law, resolution, ordinance, code, edict, guideline, policy, decree, rule, regulation, ruling or requirement issued, enacted, adopted, promulgated, applied, implemented or otherwise put into effect by or under the authority of any Governmental Entity.

"*Legal Action*" means any claim, action, suit, arbitration, proceeding or governmental investigation or proceeding.

"*Liabilities*" means any and all debts, liabilities and obligations, whether accrued or fixed, absolute or contingent, matured or unmatured or determined or determinable, including those arising under any Law, Legal Action or Order and those arising under any contract, agreement, arrangement, commitment or undertaking.

"*License Agreements*" means all agreements (whether written or oral, including license agreements, research agreements, development agreements, distribution agreements, consent to use agreements and covenants not to sue, or settlement agreements containing like provisions) to which a Person is a party or otherwise bound, pursuant to which a Person has granted or been granted any right to use, exploit

Table of Contents

or practice any Intellectual Property Rights, or that restrict the right of a Person to use or enforce any Intellectual Property Rights.

"*Licensed Intellectual Property Rights*" means any Intellectual Property Rights owned by a third party that a Person has a right to use, exploit or practice by virtue of a license grant, immunity from Legal Action, License Agreement or otherwise.

"*Liens*" means all liens, pledges, hypothecations, charges, mortgages, security interests, encumbrances, claims, infringements, interferences, options, right of first refusals, preemptive rights, community property interests or restriction of any nature (including any restriction on the voting of any security, any restriction on the transfer of any security or other asset, any restriction on the possession, exercise or transfer of any other attribute of ownership of any asset), other than Permitted Liens.

"*Losses*" shall mean any loss, damage, injury, liability, claim, demand, settlement, judgment, award, assessment, fine, penalty, Tax, fee (including reasonable attorneys' fees), charge, cost (including costs of investigation) or expense of any nature, including any lost profits and any diminution in value of the business. Notwithstanding anything to the contrary, for purposes of calculating the amount of any Losses under *Article VI* or *Article VII*, all references to "material," "materiality," "Material Adverse Effect" and the like shall be disregarded.

"*Material Adverse Effect*" means a change, event, effect, violation, inaccuracy, circumstance or other matter which, individually or in the aggregate with other changes, events, effects, violations, inaccuracies, circumstances or other matters, when considered on either a long-term basis or a short-term basis, has had or could reasonably be expected to have or give rise to a material adverse effect on: (a) the business, results of operations, condition (financial or otherwise), capitalization, liabilities, operations or financial performance or assets of the specified party; or (b) the ability of the specified party to consummate the Transactions on a timely basis; provided, however, that none of the following shall constitute or be taken into account in determining whether a Material Adverse Effect has occurred or would occur: (i) changes in general economic, financial market, business or geopolitical conditions; (ii) general changes or developments in any of the industries or markets in which the specified party or its Subsidiaries operate; (iii) changes in any applicable Laws or applicable accounting regulations or principles or interpretations thereof; (iv) any outbreak or escalation of hostilities or war or any act of terrorism, or any acts of God or natural disasters; (v) the negotiation, announcement, consummation or existence of this Agreement and the Transactions, or the performance of this Agreement and the Transactions, including compliance with the covenants set forth herein; and (vi) any action taken by the specified party, or which the specified party causes to be taken by any of its Subsidiaries, in each case which is required or permitted by or resulting from or arising in connection with this Agreement; provided, further, that the facts, circumstances, events, changes, occurrences or effects set forth in clauses (i) through (iii) and (v) above shall be taken into account in determining whether a Material Adverse Effect has occurred to the extent (but only to such extent) such facts, circumstances, events, changes, occurrences or effects have a disproportionate adverse impact on the specified party and its Subsidiaries, taken as a whole, relative to the other participants in the industries in which the specified or its Subsidiaries operate.

"*Nantucket*" means Nantucket Investments Limited, a company organized under the laws of Guernsey.

"*Nantucket Settlement Agreement*" has the meaning ascribed to it in the definition of "*Settlement Agreement*" in this *Article IX*.

"*NASDAQ*" means the Nasdaq Stock Market.

"*Net Proceeds*" has the meaning ascribed to it in the Investor Rights Agreement.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

"*Note Purchase Agreements*" means those certain (i) Amended and Restated Note Purchase Agreement by and among the Company, on the one hand, and Kingdon Associates, M. Kingdon Offshore Master Fund L.P., Kingdon Family Partnership, L.P. and Kingdon Credit Master Fund L.P., as Purchasers (collectively, the "*Kingdon Purchasers*"), executed concurrently with this Agreement (the "*Kingdon NPA*"); (ii) Note Purchase Agreement dated March 1, 2017 by and among the Company, on the one hand, and MEF 1, LP and Riverside Merchant Partners, as Purchasers; and (iii) any other agreements for the sale of promissory notes to be issued by the Company that the Company enters into during the Interim Period in accordance with *Section 5.5(b)*.

"*Notice of Assumption and Conversion of Stock Option*" means a written notice sent by Parent to each holder of Company Options which notifies the holder that at the Effective Time his or her Company Options were converted into Parent Options and sets forth the number of Parent Options and the exercise price therefor, and confirms that the Parent Options will continue to vest under the same vesting schedule as the one that applied to the Company Options.

"*Order*" means any writ, decree, injunction, order, judgment, stipulation, determination, award or similar action.

"*Parent Board*" means the Board of Directors of Parent.

"*Parent 2016 SEC Documents*" means all forms, reports and documents filed by Parent with the SEC for the period commencing on January 1, 2016 and ending on December 31, 2016, including, without limitation, Parent's Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

"*Parent Licensed Intellectual Property Rights*" means any Licensed Intellectual Property Rights of the Parent.

"*Parent Material Adverse Effect*" means a Material Adverse Effect on Parent and/or Merger Sub.

"*Parent Owned Intellectual Property Rights*" means any Intellectual Property Rights owned by or registered to Parent.

"*Parent Registered Intellectual Property Rights*" means any Registered Intellectual Property Rights included in Parent Owned Intellectual Property Rights.

"*Parent RSU*" means an RSU issued by Parent pursuant to the Jaguar Stock Plan.

"*Parent Stockholder Approval*" means (i) the approval of this Agreement, the Merger and the Transactions and the issuance of Parent Common Stock and shares of Parent's convertible non-voting common stock in connection with the Transactions by the affirmative vote of the holders of more than fifty percent (50%) of the shares of Parent Common Stock represented at the Parent Stockholders' Meeting and entitled to vote thereon, and (ii) the approval of the amendment and restatement of Parent's certificate of incorporation in the form attached hereto as **Exhibit A** by the affirmative vote of the holders of more than fifty percent (50%) of the issued and outstanding shares of Parent Common Stock entitled to vote thereon.

"*Parent Stockholder Meeting*" means the meeting of the stockholders of Parent that is called for the purpose of obtaining Parent Stockholder Approval, all as set forth in *Section 5.7(d)*.

"*Permitted Liens*" means (a) statutory Liens for current Taxes or other governmental charges not yet due and payable or the amount or validity of which is being contested in good faith, (b) mechanics', carriers', workers', repairers' and similar statutory Liens arising or incurred in the ordinary course of business for amounts which are not delinquent or which are being contested by appropriate proceedings, (c) zoning, entitlement, building and other land use regulations imposed by Governmental Entities having jurisdiction over such Person's owned or leased real property, which are not violated by the current use and operation of such real property, (d) covenants, conditions, restrictions, easements and other similar non-monetary matters of record affecting title to such Person's owned or leased real

Table of Contents

property, which do not materially impair the occupancy or use of such real property for the purposes for which it is currently used in connection with such Person's businesses, (e) any right of way or easement related to public roads and highways, which do not materially impair the occupancy or use of such real property for the purposes for which it is currently used in connection with such Person's businesses, (f) Liens arising under workers' compensation, unemployment insurance, social security, retirement and similar legislation, and (g) any other Liens that, in the aggregate, do not materially impair the value or the continued use and operation of the assets or properties to which they relate, including the rights to use a license under the applicable Contract.

"*Person*" means any individual, corporation (including any non-profit corporation), general partnership, limited partnership, limited liability partnership, joint venture, estate, trust, company (including any limited liability company or joint stock company), firm or other enterprise, association, organization, entity or Governmental Entity.

"Record Date" means the date established by Parent for the Parent Stockholder Meeting.

"*Registered Intellectual Property Rights*" means all patents and patent applications, registered copyrights and copyright applications, registered trademarks and trademark applications, and any other Intellectual Property Right that is the subject of an application, certificate, filing, registration or other document issued by, filed with, or recorded by, any Governmental Entity.

"*Related Party*" of any specified Person means: (i) an executive officer or director (or any Person that exercises substantially similar right and authority) of such specified Person; (ii) any Person owning 5% or more of the voting shares of such specified Person (assuming the exercise or conversion of any Derivative Securities of such specified Person that represents, directly or indirectly, the right to acquire voting shares of such specified Person); (iii) any Person that can significantly influence the management or operating policies of such specified Person, including the ability that would prevent such specified Person from fully pursuing its own separate interests, through the ownership of securities, contract or both; or (iv) the immediate family members or Affiliates or associates of any Person described in the foregoing clauses of this paragraph.

"*Release*" means any release, spill, emission, emptying, leaking, injection, deposit, disposal, discharge, dispersal, leaching, pumping, pouring, or migration into the atmosphere, soil, surface water, groundwater or property.

"*Representatives*" of any entity means such entity's directors, officers, employees, legal, investment banking and financial advisors, accountants and any other agents and representatives.

"*RSU Agreement*" means an agreement between an RSU Indemnitor and Parent in substantially the form attached hereto as **Exhibit B**.

"*RSU Grant Agreement*" means an agreement between Parent and each RSU Holder that sets forth the terms and conditions of such RSU Holder's Parent RSUs.

"*RSU Holder*" means a holder of a Company RSU that, at the Effective Time, is converted into a Parent RSU in accordance with *Section 5.2(b)*.

"*RSU Indemnitor*" means each Person who, as of the Closing Date, has entered into an RSU Agreement with Parent in substantially the form attached hereto as **Exhibit B**.

"*Salix*" means Salix Pharmaceuticals, Inc.

"*Salix/Napo Settlement Agreement*" means that certain Settlement, Termination, Asset Transfer and Transition Agreement between the Company and Salix, dated March 4, 2016.

"*SEC*" means the U.S. Securities and Exchange Commission.

Table of Contents

"*Settlement Agreements*" means those certain (i) Settlement and Discounted Payoff Agreement by and among the Company, as Borrower, certain lenders referred to therein and Nantucket as Collateral Agent for such lenders (the "*Nantucket Settlement Agreement*"), executed concurrently with this Agreement; (ii) Debt and Warrant Settlement Agreement by and among (x) Dorsar Investment Company, Alco Investment Company, Two Daughters LLC, on the one hand, and the Company, to be executed concurrently with this Agreement, (iii) Debt Settlement Agreement between Boies Schiller Flexner LLP and the Company, to be executed concurrently with this Agreement; (iv) Debt Settlement Agreement between Dan Becka and the Company, to be executed concurrently with this Agreement and (v) an agreement between the Company and KCSA Strategic Communications as identified on *Schedule 3*.

"*Subsidiary*" means, with respect to any Person, any corporation or other organization, whether incorporated or unincorporated, of which more than fifty percent (50%) of either the equity interests in, or the voting control of, such corporation or other organization is, directly or indirectly through subsidiaries or otherwise, beneficially owned by such Person.

"*Third Party*" means any Person other than Parent, Merger Sub or the Company.

"*Time Period*" has the meaning ascribed to it in the Investor Rights Agreement.

"*Tranche A Shares*" has the meaning ascribed to it in the Investor Rights Agreement.

"*Tranche B Shares*" has the meaning ascribed to it in the Investor Rights Agreement.

"*Tranche C Shares*" has the meaning ascribed to it in the Investor Rights Agreement.

"*Transaction Documents*" means each of the documents, agreements and instruments related to this Agreement and the Merger or the Transactions, to which the specified Person is a party, including without limitation the Settlement Agreements, the Note Purchase Agreements, the Invesco Commitment Letter, the Investor Rights Agreement and the RSU Agreements.

"*Trigger Date*" has the meaning ascribed to it in the Investor Rights Agreement.

**ARTICLE X
TERMINATION / GENERAL PROVISIONS**

10.1 *Termination.* This Agreement may be terminated at any time prior to the Effective Time, whether before or after receipt of the Company Stockholder Approval or the Parent Stockholder Approval (except as otherwise expressly noted), as follows:

(a) by mutual written agreement of each of Parent and the Company; or

(b) by either Parent or the Company, if:

(i) the Effective Time shall not have occurred on or before June 30, 2017 (the "*Outside Date*"); provided that the right to terminate this Agreement pursuant to this *Section 10.1(b)(i)* shall not be available to any party if the failure of such party to perform any of its obligations under this Agreement has been a principal cause of, or resulted in, the failure of the Merger to be consummated on or before such date; or

(ii) any Governmental Entity of competent jurisdiction shall have issued an Order permanently restraining, enjoining or otherwise prohibiting the Transactions, and such Order or other action shall have become final and non-appealable; provided, however, that the right to terminate this Agreement under this *Section 10.1(b)(ii)* shall not be available to a party if the issuance of such final, non-appealable Order was primarily due to the failure of such party to perform any of its obligations under this Agreement; or

Table of Contents

(iii) the Company Stockholder Approval shall not have been obtained at a duly held Company Stockholder Meeting (including any adjournment or postponement thereof) at which the Merger and the Transactions have been voted upon, provided that the right to terminate this Agreement under this *Section 10.1(b)(iii)* shall not be available to a party if the failure to obtain such Company Stockholder Approval was primarily due to any party's failure to perform any of its obligations under this Agreement; or

(iv) the Parent Stockholder Approval shall not have been obtained at a duly held Parent Stockholder Meeting (including any adjournment or postponement thereof) at which the issuance of Parent Common Stock in connection with the Merger has been voted upon, provided that the right to terminate this Agreement under this *Section 10.1(b)(iv)* shall not be available to a party if the failure to obtain such Parent Stockholder Approval was primarily due to any party's failure to perform any of its obligations under this Agreement; or

(c) by the Company:

(i) if Parent shall have breached or failed to perform in any material respect any of its representations, warranties, covenants or other agreements set forth in this Agreement, and cannot be cured on or before the Outside Date or, if curable, is not cured by Parent within twenty (20) days of receipt by Parent of written notice of such breach or failure; provided that the Company shall not have the right to terminate this Agreement pursuant to this *Section 10.1(c)* if Company is then in breach of any of its respective representations, warranties, covenants or agreements set forth in this Agreement; or

(d) by Parent, if:

(i) Company shall have breached or failed to perform in any material respect any of its representations, warranties, covenants or other agreements set forth in this Agreement, and cannot be cured on or before the Outside Date or, if curable, is not cured by the Company within twenty (20) days of receipt by the Company of written notice of such breach or failure; provided that Parent shall not have the right to terminate this Agreement pursuant to this *Section 10.1(d)(i)* if Parent is then in breach of any of their respective representations, warranties, covenants or agreements set forth in this Agreement;

10.2 *Effect of Termination.*

(a) In the event that this Agreement is terminated and Merger and the Transactions are abandoned pursuant to Section 10.1, written notice thereof shall be given to the other party, specifying the provisions hereof pursuant to which such termination is made and describing the basis therefor in reasonable detail, and this Agreement shall forthwith become null and void and of no further force or effect whatsoever without liability on the part of any party hereto, and all rights and obligations of any party hereto shall cease; provided, however, that, notwithstanding anything in the foregoing to the contrary (a) no such termination shall relieve any party hereto of any liability or damages resulting from or arising out of any fraud or willful and malicious breach of this Agreement; and (b) any confidentiality agreement, this Section 10.2, Section 10.3, Section 10.6, this Article X and the definitions of all defined terms appearing in such sections and Article IX shall survive any termination of this Agreement pursuant to Section 10.1. If this Agreement is terminated as provided herein, all filings, applications and other submissions made pursuant to this Agreement, to the extent practicable, shall be withdrawn from the Governmental Entity or other Person to which they were made.

(b) Notwithstanding any provision herein to the contrary, if the Closing fails to occur on or prior to July 31, 2017 for any reason except as a result, directly or indirectly, of (i) lack of either Company Stockholder Approval or Parent Stockholder Approval, or (ii) the Company either (x) fails to perform in accordance with the terms and conditions of the Binding Agreement, this

Table of Contents

Agreement or the Transaction Documents or (y) fails to abide by or breaches the provisions or representations, warranties and covenants of the Binding Agreement, this Agreement or the Transaction Documents, then, on or before the close of business on August 7, 2017 Parent shall issue 2,000,000 shares of restricted Common Stock to the Company (adjusted appropriately for stock splits, combinations, reclassifications and the like)(the "*Break-up Fee*").

10.3 *Notices.* All notices, requests, consents, claims, demands, waivers and other communications hereunder shall be in writing and shall be deemed to have been given and duly delivered: (i) when delivered (or delivery was properly tendered) by hand; (ii) when delivered (or delivery was properly tendered) by the addressee if sent by a nationally recognized overnight courier; or (iii) on the date sent by e-mail of a PDF document (with confirmation of transmission) if sent during normal business hours of the recipient, and on the next Business Day if sent after normal business hours of the recipient, if the original of such notice was duly transmitted in accordance with (i) or (ii) of this *Section 10.3* or transmitted by certified mail, return receipt requested, postage prepaid. Such communications must be sent to the respective parties at the addresses for such parties on the signature page hereto (or at such other address for a party as shall be specified in a notice given in accordance with this *Section 10.3*):

if to Parent, to:

Jaguar Animal Health, Inc.
201 Mission Street, Suite 2375
San Francisco, CA 94105
Attention: Lisa A. Conte
Email: lconte@jaguaranimalhealth.com

With a copy to (which will not constitute notice to Parent)

Reed Smith LLP 1510 Page Mill Road, Suite 110
Palo Alto, CA 94304
Attn: Donald Reinke, Esq.
Email: dreinke@reedsmith.com

if to Company, to:

Napo Pharmaceuticals, Inc.
201 Mission Street, Suite 2375
San Francisco, CA 94105
Attention: Lisa Conte, Interim Chief Executive Officer
Email:

with a copy to (which will not constitute notice to Company):

Boies Schiller Flexner
333 Main Street
Armonk, NY 10504
Attention: William S. Ohlemeyer, Esq.
Email: WOhlemeyer@BSFLLP.com

or to such other Persons, addresses or email addresses as may be designated in writing by the Person entitled to receive such communication as provided above.

10.4 *Interpretation.* When a reference is made in this Agreement to Exhibits, such reference shall be to an Exhibit to this Agreement unless otherwise indicated. When a reference is made in this Agreement to Sections, such reference shall be to a Section of this Agreement. Unless otherwise indicated the words "include," "includes" and "including" when used herein shall be deemed in each case to be followed by the words "without limitation." The headings contained in this Agreement are

Table of Contents

for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. When reference is made herein to "the business of" an entity, such reference shall be deemed to include the business of all direct and indirect subsidiaries of such entity. A reference in this Agreement to \$ or dollars is to U.S. dollars. The words "hereof," "herein" and "hereunder" and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. References to the "date hereof" shall mean the date first written above. References to "this Agreement" shall include the Company Disclosure Letter and the Parent Disclosure Letter. Any reference to a party to this Agreement shall include a reference to each and every subsidiary of such party to the extent applicable, unless otherwise expressly provided.

10.5 *Counterparts.* This Agreement may be executed in one or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party, it being understood that all parties need not sign the same counterpart.

10.6 *Entire Agreement.* This Agreement and the documents and instruments and other agreements among the parties hereto as contemplated by or referred to herein, including any confidentiality agreement, the Company Disclosure Letter and the Parent Disclosure Letter constitute the entire agreement among the parties with respect to the subject matter hereof and supersede all prior agreements and understandings, both written and oral, among the parties with respect to the subject matter hereof.

10.7 *Amendment.* This Agreement may be amended, supplemented or modified by action taken by or on behalf of the respective Boards of Directors of the parties hereto at any time prior to the Effective Time, but only to the extent permitted by applicable Law or in accordance with the rules of any self-regulatory organization. No such amendment, supplement or modification shall be effective unless set forth in a written instrument duly executed by or on behalf of each party hereto. After the Effective Time, any such amendment, supplement or modification of this Agreement shall require the written consent of the Board of Directors of Parent and of the Company Representative.

10.8 *Waiver.* At any time prior to the Effective Time any party hereto, by action taken by or on behalf of its Board of Directors, may to the extent permitted by applicable Law (i) extend the time for the performance of any of the obligations or other acts of the other party hereto, (ii) unless prohibited by applicable Law, waive any inaccuracies in the representations and warranties or compliance with the covenants and agreements of the other party hereto contained herein or in any document delivered pursuant hereto or (iii) unless prohibited by applicable Law, waive compliance with any of the conditions of such party contained herein. No such extension or waiver shall be effective unless set forth in a written instrument duly executed by or on behalf of the party extending the time of performance or waiving any such inaccuracy or non-compliance. No waiver by any party of any term or condition of this Agreement, in any one or more instances, shall be deemed to be or construed as a waiver of the same or any other term or condition of this Agreement on any future occasion.

10.9 *Severability.* In the event that any provision of this Agreement or the application thereof, becomes or is declared by a court of competent jurisdiction to be illegal, void or unenforceable, the remainder of this Agreement will continue in full force and effect and the application of such provision to other Persons or circumstances will be interpreted so as reasonably to effect the intent of the parties hereto. The parties further agree to negotiate in good faith to modify this Agreement so as to replace such void or unenforceable provision of this Agreement with a valid and enforceable provision that is mutually agreeable to the parties and that will achieve, to the extent possible, the economic, business and other purposes of such void or unenforceable provision.

10.10 *Specific Performance.* The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with its specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to specific

Table of Contents

performance of the terms of this Agreement in addition to any other remedy at law or equity. The parties accordingly agree that the parties will be entitled to an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement, this being in addition to any other remedy to which they are entitled at law or in equity or under this Agreement.

10.11 *Governing Law; Dispute Resolution.* This Agreement, and all claims or causes of action (whether at law, in contract or in tort) that may be based upon, arise out of or relate to this Agreement or the negotiation, execution or performance hereof, shall be governed by and construed in accordance with the Laws of the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of the Laws of any jurisdiction other than the State of Delaware. Each of the parties hereto irrevocably (i) consents to submit itself to the personal jurisdiction of the Court of Chancery of the State of Delaware in the event any dispute arises out of this Agreement or any of the Transactions, and, in connection with any such matter, to service of process by notice as otherwise provided herein, (ii) agrees that it will not attempt to deny or defeat such personal jurisdiction by motion or other request for leave from any such court and (iii) agrees that it will not bring any action relating to this Agreement or any of the Transactions in any court other than the foregoing Delaware court or, to the fullest extent permitted by applicable Law, the foregoing Federal court. Any party may make service on another party by sending or delivering a copy of the process to the party to be served at the address and in the manner provided for the giving of notices in *Section 10.3*.

10.12 *Rules of Construction.* The parties hereto are sophisticated and have been represented by attorneys throughout the transactions contemplated hereby who have carefully negotiated the provisions hereof. As a consequence, the parties do not intend that the presumptions of laws or rules relating to the interpretation of contracts against the drafter of any particular clause should be applied to this Agreement or any agreement or instrument executed in connection herewith, and therefore waive their effects.

10.13 *Assignment; Parties in Interest.* No party may assign either this Agreement or any of its rights, interests, or obligations hereunder without the prior written approval of the other party. Subject to the preceding sentence, this Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns, and, except as provided in the following sentence, nothing in this Agreement, express or implied, is intended to or shall confer upon any other Person (other than (a) the Parent Indemnitees to the extent provided in *Article VI*, (b) the Company Indemnitees to the extent provided in *Article VII*, and (c) from and after the Effective Time, the right of the existing creditors of the Company to receive shares of Parent Common Stock or Parent's convertible non-voting common stock in connection with the Debt Exchange pursuant to *Section 2.2*) any rights, interests, benefits or remedies of any nature whatsoever under or by reason of this Agreement. No current or former employee, director, officer, stockholder, creditor, agent, representative or advisor of Parent or Company, or any of their respective Affiliates, shall have any liability for any obligations or liabilities of Parent or Merger Sub hereunder or under the Transaction Documents, other than to the extent provided in *Article VI* and *Article VII*.

10.14 *WAIVER OF JURY TRIAL.* EACH PARTY HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE ACTIONS OF THE PARTIES IN THE NEGOTIATION, ADMINISTRATION, PERFORMANCE AND ENFORCEMENT HEREOF.

10.15 *Conflict Disclosure/Waiver.* Parent and Company acknowledge that legal counsel to Parent, Reed Smith, LLP ("Parent Counsel") has represented Company in numerous other transactions as

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

general corporate counsel to Company from time to time, including but not limited to the Note Purchase Agreements. Boise Schiller Flexner has represented Company in connection with the Merger, including but not limited to this Agreement and the Settlement Agreements, notwithstanding that Parent Counsel was requested by Company and Parent to be the initial scrivener for all such Transaction Documents. Company and Parent hereby waive any such conflict(s) and have been apprised to seek separate legal representation in connection with this waiver and acknowledge that each may enter into a Conflict Waiver Letter Agreement with Parent Counsel in form and substance reasonably acceptable to Parent Counsel and Company and Parent, respectively.

[Remainder of Page Intentionally Left Blank; Signature Page Follows]

A-54

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective officers duly authorized thereunto, as of the date first written above.

NAPO PHARMACEUTICALS, INC.

By: /s/ CHARLES THOMPSON

Name: Charles Thompson
Title: Chief Financial Officer

NAPO ACQUISITION CORPORATION

By: /s/ KAREN S. WRIGHT

Name: Karen S. Wright
Title: Chief Financial Officer and Treasurer

JAGUAR ANIMAL HEALTH, INC.

By: /s/ KAREN S. WRIGHT

Name: Karen S. Wright
Title: Chief Financial Officer and Treasurer

COMPANY REPRESENTATIVE

By: /s/ GREGORY STOCK

Name: Gregory Stock

[Signature Page to Agreement and Plan of Merger]

Table of Contents**Appendix I Index to Certain Defined Terms**

Term	Section
AAA	6.3(d)(ii)
Agreement	Introductory paragraph
Basket Amount	6.6(b)
Blue Sky Laws	3.4(b)
Break-up Fee	10.2(b)
Certificate of Merger	1.1
Certificates	2.5(a)(ii)(A)
Closing Date	1.2
Closing	1.2
Company Approvals	3.6(c)
Company Bylaws	1.6(a)(iii)
Company Charter	1.6(a)(iii)
Company Claim Notice	7.3(a)
Company Common Stock	2.1(a)
Company Disclosure Letter	Article III introductory paragraph
Company Disputed Matters	6.3(c)
Company Financial Statements	3.5(a)
Company Indemnification Notice	7.2(a)
Company Indemnitees	7.1
Company Insurance Policies	3.18
Company Leased Real Estate	3.11(b)
Company Leases	3.11(b)
Company Option Plan	3.2(b)
Company Options	3.2(b)
Company Permits	3.6(b)
Company Plans	3.9(b)
Company Representative	2.3
Company Response Notice	6.3(c)
Company Stock Record	2.5(a)(i)
Company Stockholder	2.5(a)(i)
Company Third Party Claim	7.3
Company Transaction Documents	3.3
Company Warrant	5.2(a)
Company	Introductory paragraph
Contingent Number of Shares	5.2(b)
Contingent Right Holder	2.1(c)
Contingent Right Holders Notice Date	2.5(a)(ii)
Contingent Right	2.1(a)
Debt Exchange	2.2
DGCL	Recitals
Dissenting Shares	1.7(a)
Effective Time	1.1
ERISA Affiliate	3.9(b)
ERISA	3.9(b)

Term	Section
Exchange Act	3.4(b)
Exchange Agent	2.5(a)(ii)
Final Determination	Schedule 1
Final Determination Date	Schedule 1
Fixed Number of Shares	5.2(b)
Former Company DOEA Indemnitee	5.12(a)
GAAP	3.5(a)

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Governmental Entity	3.4(b)
Inquiry	5.9(a)
Interim Period	5.5(a)
Jaguar Stock Plan	5.2(b)
Merger Sub	Introductory paragraph
Merger	1.1
Merger Shares	Schedule 1
Outside Date	10.1(b)(i)
Parent Board Members	1.5(a)(ii)
Parent Bylaws	1.6(b)(ii)
Parent Charter	1.6(b)(ii)
Parent Claim Notice	6.4(a)
Parent Common Stock	2.1(a)
	Article IV
Parent Disclosure Letter	introductory paragraph
Parent Disputed Matters	7.2(c)
Parent Financial Statements	4.5(b)
Parent Indemnification Notice	6.3(a)
Parent Indemnitees	6.2
Parent Insurance Policies	4.14
Parent Option Plans	4.2(c)(ii)
Parent Options	4.2(c)(ii)
Parent Response Notice	7.2(c)
Parent SEC Documents	4.5(a)
Parent Third Party Claim	6.4
Parent Transaction Documents	4.3
Parent Warrants	5.2(a)
Parent	Introductory paragraph
Permitted Issuance	5.6(xi)
Purchase Price	2.5
Regulatory Agreement	3.16
Returned Tranche A Shares	Schedule 2
RSU	3.2(b)
Sarbanes-Oxley Act	3.5(d)
Schedule of RSU Indemnitors	6.1
Securities Act	3.4(b)
Survival Period	6.6
Surviving Corporation	1.1
Tax Returns	3.12(b)
Tax	3.12(a)
Transactions	Recitals

Appendix I

Table of Contents

SCHEDULE 1

CONTINGENT RIGHT OF COMPANY STOCKHOLDERS

The Contingent Right Holders shall be entitled to receive from the Exchange Agent in respect of their Contingent Rights a number of shares of Parent Common Stock in the aggregate (such shares, the "*Merger Shares*") equal to the sum of the following:

A. that number of shares of Parent Common Stock equal to the aggregate Forfeited Fixed Number of Shares (as such term is defined in the RSU Agreements) of Parent Common Stock issuable under the RSUs held by the RSU Indemnitors that are forfeited by the RSU Indemnitors pursuant to Section 3 of the RSU Agreements, if any (which, for the avoidance of doubt, shall be no greater than the number of Tranche B Shares multiplied by a fraction, the numerator of which is the total Fixed Number of Shares of Parent Common Stock issuable under the RSUs held by the RSU Indemnitors and the denominator of which is the sum of (i) the total number of Tranche B Shares plus (ii) the total Fixed Number of Shares of Parent Common Stock issuable under the RSUs held by the RSU Indemnitors; and

B. if, and only if, on or prior to the third anniversary of the Trigger Date, the aggregate Net Proceeds to Nantucket from the sale of Tranche A Shares equals or exceeds the Hurdle applicable for that Time Period, a number of shares equal to the sum of (i) the aggregate number of Tranche B Shares released from the Escrow Account and delivered to the Exchange Agent pursuant to Section 2.3(d)(i) of the Investor Rights Agreement, if any, plus (ii) the aggregate number of Tranche A Shares delivered to the Exchange Agent pursuant to Section 2.2(b) of the Investor Rights Agreement multiplied by a fraction, the numerator of which is the total number of Tranche B Shares and the denominator of which is the sum of (x) total number of Tranche B Shares plus, (y) the aggregate Fixed Number of Shares of Parent Common Stock issuable under all of the Parent RSUs that were issued pursuant to Section 5.2(b) of this Agreement (including those Fixed Number of Shares that were forfeited either pursuant to Section 6.3(b) of this Agreement and/or pursuant to the RSU Agreements).

For the avoidance of doubt, if the aggregate Net Proceeds to Nantucket from the sale of Tranche A Shares does not equal or exceed the Hurdle applicable for a relevant Time Period on or prior to the third anniversary of the Trigger Date, (x) no Tranche A Shares or Tranche B Shares shall be delivered to the Exchange Agent and (y) the Contingent Right Holders shall have no right to receive any rights, assets or property (including any Tranche A Shares or Tranche B Shares) in respect of their Company Common Stock or Contingent Rights, whether arising from or in connection with the Merger or any of the other transactions contemplated hereby or otherwise.

The number of Merger Shares, if any, to be issued to each Contingent Right Holder shall be calculated by multiplying the total number of Merger Shares by a fraction, the numerator of which is the maximum number of shares of Parent Common Stock set forth opposite such Contingent Right Holder's name on the Company Stock Record delivered by the Company to Parent pursuant to Section 2.2(a), and the denominator of which is the maximum number of shares of Parent Common Stock that all the Contingent Right Holders may be entitled to receive, as set forth in the Company Stock Record; provided that in calculating the number of whole shares of Parent Common Stock to be issued to each Contingent Right Holder, after aggregating all fractional shares of Parent Common Stock that otherwise such Contingent Right Holder would be entitled to be issued, if any, the number of shares of Parent Common Stock to be issued to each Contingent Right Holder, if any, shall be rounded down to the next lower whole number of shares.

The final determination (the "*Final Determination*") as to the final number of Merger Shares, if any, that will be issued to the Contingent Right Holders shall be made by Parent in its reasonable discretion no later than the later to occur of (i) the date on which the Survival Period has ended and

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

there are no outstanding claims for indemnification under Article VI, and (ii) the third anniversary of the Trigger Date (the "*Final Determination Date*").

Notwithstanding anything to the contrary herein, except as expressly set forth in this *Schedule 1* and Article VII, the Contingent Right Holders shall not be entitled to receive any rights, assets or property (including cash) in respect of their Company Common Stock or Contingent Rights from and after the Effective Time, whether arising from or in connection with the Merger or any of the other transactions contemplated hereby or otherwise.

Schedule 1-2

Table of Contents

SCHEDULE 2

**NUMBER OF SHARES OF PARENT COMMON STOCK ISSUABLE
UNDER PARENT WARRANTS, PARENT RSUs AND
PARENT STOCK OPTIONS**

Warrants: At the Effective Time, the Company Warrants shall be converted into Parent Warrants that shall be exercisable for an aggregate of 1,237,283 shares of Parent Common Stock; provided, however, that in the event there are either (a) additional issuances by Parent of Parent Common Stock between the date hereof and the Closing that are permitted under *Section 5.6(a)(xi)* of this Agreement or (b) additional Company equity and convertible debt financings between the date hereof and the Closing that are permitted under *Section 5.5(b)* of this Agreement, and any such issuance or financing described in clause (a) or (b) above results in the Tranche A Shares or the Tranche C Shares constituting less than the percentages specified in Section 2.1(a)(i) or 2.1(a)(iii) of the Investor Rights Agreement, as applicable, Parent may increase the number of Tranche A Shares and Tranche C Shares to be issued pursuant to Sections 2.1(a)(i) and 2.1(a)(iii) of the Investor Rights Agreement, as applicable, by an amount that is sufficient to cause the applicable percentages to be satisfied and correspondingly reduce the number of shares of Parent Common Stock to be issued upon exercise of the Parent Warrants (with such reduction being applied on a pro rata basis based on the total number of Tranche B Shares and shares of Parent Common Stock issuable upon exercise of the Parent RSUs, Parent Options and Parent Warrants).

RSUs: Prior to any adjustments in the number of shares of Company Common Stock issuable under the Parent RSUs subsequent to consummation of the Merger as set forth below, at the Effective Time, the Company RSUs shall be converted into Parent RSUs with an aggregate Fixed Number of Shares of Parent Common Stock issuable under such Parent RSUs of 5,953,557, and the Contingent Number of Shares determined as set forth below; provided, however, that in the event there are either (a) additional issuances by Parent of Parent Common Stock between the date hereof and the Closing that are permitted under *Section 5.6(a)(xi)* of this Agreement or (b) additional Company equity and convertible debt financings between the date hereof and the Closing that are permitted under *Section 5.5(b)* of this Agreement, and any such issuance or financing described in clause (a) or (b) above results in the Tranche A Shares or the Tranche C Shares constituting less than the percentages specified in Section 2.1(a)(i) or 2.1(a)(iii) of the Investor Rights Agreement, as applicable, Parent may increase the number of Tranche A Shares and Tranche C Shares to be issued pursuant to Sections 2.1(a)(i) and 2.1(a)(iii) of the Investor Rights Agreement, as applicable, by an amount that is sufficient to cause the applicable percentage to be satisfied and correspondingly reduce the Fixed Number of Shares of Parent Common Stock issuable under such Parent RSUs (with such reduction being applied on a pro rata basis based on the total number of Tranche B Shares and shares of Parent Common Stock issuable upon exercise of the Parent RSUs, Parent Options and Parent Warrants).

Options: At the Effective Time, Parent shall issue to the holders of Company Options new Parent Options that shall be exercisable for an aggregate of 548,805 shares of Parent Common Stock; provided, however, that in the event there are either (a) additional issuances by Parent of Parent Common Stock between the date hereof and the Closing that are permitted under *Section 5.6(a)(xi)* of this Agreement or (b) additional Company equity and convertible debt financings between the date hereof and the Closing that are permitted under *Section 5.5(b)* of this Agreement and any such issuance or financing described in clause (a) or (b) above results in the Tranche A Shares or the Tranche C Shares constituting less than the percentages specified in Section 2.1(a)(i) or 2.1(a)(iii) of the Investor Rights Agreement, as applicable, Parent may increase the number of Tranche A Shares and Tranche C Shares to be issued pursuant to Sections 2.1(a)(i) and 2.1(a)(iii) of the Investor Rights Agreement, as applicable, by an amount that is sufficient to cause the applicable percentages to be satisfied and correspondingly reduce the number of shares of Parent Common Stock to be issued upon exercise of the Parent Options (with such reduction being applied on a pro rata basis based on the

Table of Contents

total number of Tranche B Shares and shares of Parent Common Stock issuable upon exercise of the Parent RSUs, Parent Options and Parent Warrants). The exercise price per share under the new Parent Options shall be as set forth in each option holder's Notice of Assumption and Conversion of Stock Option, which Parent shall send to each option holder no later than thirty (30) days after the Closing.

Contingent Number of Shares issuable under the Parent RSUs:

If, and only if, pursuant to Section 2.2(b) of the Investor Rights Agreement, Nantucket transfers a portion of its unsold Tranche A Shares to the Exchange Agent (the "Returned Tranche A Shares"), the RSU Holders shall be entitled to receive from the Exchange Agent in respect of their Parent RSUs (including those Parent RSUs held by the RSU Indemnitors, if any, for which all or a portion of the Fixed Number of Shares were forfeited either pursuant to Section 6.3(b) of this Agreement and/or pursuant to the RSU Agreements), a Contingent Number of Shares of Parent Common Stock equal to the total number of Returned Tranche A Shares multiplied by a fraction, the numerator of which is the total Fixed Number of Shares of Parent Common Stock issuable under all of the Parent RSUs that were issued pursuant to Section 5.2(b) of this Agreement (including those Fixed Number of Shares that were forfeited either pursuant to Section 6.3(b) of this Agreement and/or pursuant to the RSU Agreements), and the denominator of which is the sum of (i) the total number of Tranche B Shares plus (ii) the total Fixed Number of Shares of Parent Common Stock issuable under all of the Parent RSUs that were issued pursuant to Section 5.2(b) of this Agreement (including those Fixed Number of Shares that were forfeited either pursuant to Section 6.3(b) of this Agreement and/or pursuant to the RSU Agreements).

For the avoidance of doubt, if the aggregate Net Proceeds to Nantucket from the sale of Tranche A Shares does not exceed the Hurdle applicable for a relevant Time Period, on or prior to the third anniversary of the Trigger Date, (x) no Tranche A Shares shall be delivered to the Exchange Agent and (y) no Contingent Number of Shares shall be issued to any holder of Parent RSUs issued pursuant to the Merger.

The Contingent Number of Shares to be issued to the RSU Holders, if any, will be determined by Parent in its reasonable discretion on the first to occur of (i) date that is thirty (30) days after the date on which the Net Proceeds from all sales of Tranche A Shares during the applicable Time Period exceeds the Hurdle for the applicable Time Period, which time is set forth in Section 2.2(b) of the Investor Rights Agreement, (ii) the date on which all of the Tranche A Shares have been sold by Nantucket and (iii) the third anniversary of the Trigger Date.

The number of Fixed Number of Shares issuable pursuant to Parent RSUs to be issued to each RSU Holder shall be calculated by multiplying the total Fixed Number of Shares issuable under all of the Parent RSUs by a fraction, the numerator of which is the aggregate number of shares of Company Common Stock issuable under the Company RSUs held by such RSU Holder immediately prior to the Effective Time, and the denominator of which is the total number of shares of Company Common Stock issuable under the Company RSUs held by all of the RSU Holders immediately prior to the Effective Time; provided that in calculating the number of whole shares of Parent Common Stock to be issued to each RSU Holder, after aggregating all fractional shares of Parent Common Stock that otherwise such RSU Holder would be entitled to be issued, the number of shares of Parent Common Stock to be issued to each RSU Holder shall be rounded down to the next lower whole number of shares. Notwithstanding the foregoing, the Fixed Number of Shares allocated to the RSU Indemnitors pursuant to this paragraph shall be subject to forfeiture pursuant to Section 6.3(b) of this Agreement and the RSU Agreements.

The number of Contingent Number of Shares issuable pursuant to Parent RSUs to be issued to each RSU Holder shall be calculated in the same manner as that set forth in the preceding paragraph with respect to the calculation of the number of Fixed Number of Shares issuable pursuant to Parent

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

RSUs to be issued to each RSU Holder. For the avoidance of doubt, in calculating the number of Contingent Number of Shares to be issued to each RSU Holder, the total Fixed Number of Shares of Parent Common Stock issuable under all of the Parent RSUs that were issued pursuant to *Section 5.2(b)* of this Agreement shall include those Fixed Number of Shares that were forfeited either pursuant to *Section 6.3(b)* of this Agreement and/or pursuant to the RSU Agreements.

Notwithstanding anything to the contrary herein, except as expressly set forth in this *Schedule 2*, *Section 5.2(b)* of this Agreement, the Jaguar Stock Plan, the Restricted Stock Unit Award Agreements to be entered into between each RSU Holder and Parent at the Closing, and, with respect to the RSU Indemnitors only, the RSU Agreements, the RSU Holders shall not be entitled to receive any rights, assets or property (including cash) in respect of their Company RSUs from and after the Effective Time, whether arising from or in connection with the Merger or any of the other transactions contemplated hereby or otherwise.

Schedule 2-3

Table of Contents**SCHEDULE 3****SCHEDULE OF PARENT STOCK AND WARRANTS TO BE ISSUED TO CREDITORS OF THE COMPANY**

Name of Creditor	Class of Parent Stock	Number of Shares
Nantucket	Common Stock [balance of Tranche C Shares]	1,940,382 ₁
Nantucket	convertible non-voting common stock [Tranche A Shares]	18,479,826 ₂
Nantucket	convertible non-voting common stock, to be held in escrow [Tranche B Shares]	19,900,202 ₃
Dorsar Investment Company	convertible non-voting common stock	678,483
Alco Investment Company	convertible non-voting common stock	1,367,903
Two Daughters, LLC	convertible non-voting common stock	106,655
Boies, Schiller & Flexner LLP	convertible non-voting common stock	2,014,131
Dan Becka	convertible non-voting common stock	555,395
KCSA Strategic Communications	Common Stock	64,863

1 Subject to adjustment in accordance with footnote 3 below.

2 Subject to adjustment in accordance with footnote 3 below.

3 In the event there are either (a) additional issuances by Parent of Parent Common Stock between the date hereof and the Closing that are permitted under *Section 5.6(a)(xi)* of this Agreement or (b) additional Company equity and convertible debt financings between the date hereof and the Closing that are permitted under *Section 5.5(b)* of this Agreement, and any such issuance or financing described in clause (a) or (b) above results in the Tranche A Shares or the Tranche C Shares constituting less than the percentages specified in *Section 2.1(a)(i)* or *2.1(a)(iii)* of the Investor Rights Agreement, as applicable, Parent may increase the number of Tranche A Shares and Tranche C Shares to be issued pursuant to *Sections 2.1(a)(i)* and *2.1(a)(iii)* of the Investor Rights Agreement, as applicable, by an amount that is sufficient to cause the applicable percentages to be satisfied and correspondingly reduce the number of Tranche B Shares (with such reduction being applied on a pro rata basis based on the total number of Tranche B Shares and shares of Parent Common Stock issuable upon exercise of the Parent RSUs, Parent Options and Parent Warrants); provided, however, the number of Tranche B Shares to be issued shall in any event represent no less than 17.4% of the total issued and outstanding capital stock of Parent (on a fully diluted basis, as such term defined in *Section 2.1(d)* of the Investor Rights Agreement) as of immediately following the Closing

Schedule 3

Table of Contents

SCHEDULE 4

ADDITIONAL ISSUANCES

Name of Person	Class of Parent Stock	Number of Shares
MEF I, LP/Riverside Merchant Partners LLC	Convertible note	[2,343,752] ¹
Invesco	Common Stock	3,243,243
Kingdon	Convertible note	[10,810,811] ²
[Kingdon legal]	Common Stock	54,054

¹ As of the date hereof, only 50% of the total notes have been purchased. It is anticipated that the remaining 50% of the total notes will be purchased on or prior to the Effective Time. The bracketed number of shares of Parent Common Stock reflects the number of shares reserved for conversion of the notes based on the purchase of 100% of the total notes. These notes will not be converted at the Effective Time.

² The bracketed number of shares of Parent Common Stock reflects the number of shares reserved for conversion of the note. This note will not be converted at the Effective Time.

Table of Contents**SCHEDULE 5****SCHEDULE OF RSU INDEMNITORS**

Name of RSU Indemnitee	Fixed Number of Shares issuable under the Parent RSUs ¹ that are subject to the indemnification provisions of Article VI
Lisa Conte	1,925,512
Pravin Chaturvedi	87,072
Steven King	435,076
Charles Thompson	481,448
Sir William Young	361,525
Jack Van Hulst	210,909
Gregory Stock	461,935
Richard Fields	342,244
Thomas Van Dyck	361,525
Josh Mailman	100,410
TOTAL	4,767,656

For purposes of *Section 6.6(c)*, the "total number of shares listed on the Schedule of RSU Indemnitors set forth on *Schedule 5*" means the total Fixed Number of Shares set forth on this *Schedule 5*, as adjusted pursuant to *Schedule 2*.

¹

Fixed Number of Shares are subject to adjustment as set forth in *Schedule 2*.

Schedule 5

**THIRD AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
JAGUAR HEALTH, INC.**

(originally incorporated on June 6, 2013)

ARTICLE I

The name of the corporation is Jaguar Health, Inc. (the "*Corporation*").

ARTICLE II

The address of the Corporation's registered office of the Corporation in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle, 19801. The name of the Corporation's registered agent at that address is The Corporation Trust Company.

ARTICLE III

The nature of the businesses or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law as the same exists or as may hereafter be amended from time to time ("*DGCL*"). The Corporation will have perpetual existence.

ARTICLE IV

The total number of shares of stock that the Corporation shall have authority to issue is Two Hundred Thirty-Five Million (235,000,000) shares, consisting of (i) One Hundred Seventy-Five Million (175,000,000) shares of common stock, \$0.0001 par value per share ("*Common Stock*"), (ii) Fifty Million (50,000,000) shares of convertible non-voting common stock, \$0.0001 par value per share ("*Non-Voting Common Stock*"), and (iii) Ten Million (10,000,000) shares of Preferred Stock, \$0.0001 par value per share ("*Preferred Stock*").

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof, in respect of each class of capital stock of the Corporation.

A. COMMON STOCK AND NON-VOTING COMMON STOCK

1. *General.* The voting, dividend and liquidation rights of the holders of Common Stock and Non-Voting Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. *Voting.*

2.1. The holders of the Common Stock shall have voting rights at all meetings of stockholders to vote on each matter on which stockholders are generally entitled to vote, each such holder being entitled to one vote for each share thereof held by such holder; *provided, however,* that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Third Amended and Restated Certificate of Incorporation (together with any amendments thereto, including the terms of any certificate of designations of any series of Preferred Stock, "*Third Restated Certificate*") that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together as a class with the holders of one or more other such series, to vote thereon pursuant to this Third Restated Certificate or the DGCL. There shall be no cumulative voting.

Table of Contents

2.2. The holders of the Non-Voting Common Stock are not entitled to vote, except on an as converted basis with respect to any Change of Control that is submitted to the stockholders of the Corporation for approval. There shall be no cumulative voting. As used herein, "*Change of Control*" means (i) the merger, consolidation or other business combination of the Corporation with any entity in which the stockholders of the Corporation immediately prior to such transaction in the aggregate cease to own at least 50% of the voting power of the voting securities of the entity surviving or resulting from such transaction (or the ultimate parent thereof), (ii) the sale, transfer, lease, license, assignment or other disposal of all or substantially all of the assets of the Corporation or (iii) any transaction or series of transactions in which more than 50% of the voting power of the Corporation's voting securities is transferred to any person or group other than pursuant to a transaction or series of transactions primarily for capital raising purposes.

2.3. Subject to Section A.5.5.3 of this Article IV, the number of authorized shares of Common Stock and/or Non-Voting Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the voting power of the stock of the Corporation entitled to vote thereon, irrespective of the provisions of Section 242(b)(2) of the DGCL.

3. *Dividends.* Dividends may be declared and paid on the Common Stock and Non-Voting Common Stock as and when determined by the board of directors of the Corporation ("*Board of Directors*"), subject to any preferential dividend or other rights of any then outstanding Preferred Stock, the requirements of applicable law, and, so long as Nantucket Investments Limited ("*Nantucket*") or any investment fund, investment vehicle or other account that is, directly or indirectly, managed or advised by Nantucket or any of its affiliates owns any shares of Non-Voting Common Stock, the Corporation obtaining the prior written consent of Nantucket. The holders of Common Stock and the holders of Non-Voting Common Stock shall be entitled to share equally and ratably, on a per share basis, in such dividends and other distributions of cash, property or shares of stock of the Corporation as may be declared by the Board of Directors from time to time out of assets or funds of the Corporation legally available therefor; *provided, however*, that in the event that such dividend is paid in the form of Common Stock or rights to acquire Common Stock, the holders of shares of Non-Voting Common Stock shall receive shares of Non-Voting Common Stock or rights to acquire shares of Non-Voting Common Stock, as the case may be.

4. *Liquidation.* Upon the dissolution or liquidation of the Corporation, whether voluntary or involuntary, holders of Common Stock and holders of Non-Voting Common Stock shall be entitled to receive equally and ratably, on a per share basis, all assets of the Corporation available for distribution to its stockholders, subject to any preferential or other rights of any then outstanding Preferred Stock.

5. *Conversion Rights.* The holders of the Non-Voting Common Stock shall have conversion rights as follows (the "*Conversion Rights*"):

5.1. *Right to Convert.* Each share of Non-Voting Common Stock shall be convertible, at the option of the holder thereof, at any time and from time to time on or after April 1, 2018, and without the payment of additional consideration by the holder thereof, into one fully-paid and non-assessable share of Common Stock.

5.2 *Automatic Conversion.* Each share of Non-Voting Common Stock shall automatically, without any further action on the part of the Corporation, any holder of Non-Voting Common Stock or any other party, including, without limitation, any payment of additional consideration by the holder thereof, convert into one fully paid and non-assessable share of Common Stock (a) upon a transfer of such share to any person or entity that is neither an affiliate of Nantucket nor an investment fund, investment vehicle or other account that is, directly or indirectly, managed or advised by Nantucket or any of its affiliates pursuant to a sale of such stock to a third-party for cash in accordance with the terms and conditions set forth in the Investor Rights Agreement,

Table of Contents

dated March 31, 2017, between the Corporation and Nantucket (the "IRA"), or (b) upon the release or transfer of such share to "Legacy Stockholders" as defined under the IRA. As used herein, "transfer" of a share or shares of Non-Voting Common Stock shall mean any sale, exchange, assignment, transfer, conveyance, gift, hypothecation or other transfer or disposition of such share or shares.

5.3 *Termination of Conversion Rights.* In the event of a liquidation, dissolution or winding up of the Corporation, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Non-Voting Common Stock.

5.4 *Fractional Shares.* No fractional shares of Common Stock shall be issued upon conversion of the Non-Voting Common Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Non-Voting Common Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

5.5 *Mechanics of Conversion.*

5.5.1 *Notice of Conversion.* Subject to any contractual limitations between Nantucket and the Corporation, in order for a holder of Non-Voting Common Stock to voluntarily convert the same into shares of Common Stock pursuant to Section A.5.1 of this Article IV, such holder shall (a) provide written notice to the Corporation's transfer agent at the office of the transfer agent for the Non-Voting Common Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent) that such holder elects to convert all or any number of such holder's shares of Non-Voting Common Stock and (b) if such holder's shares are certificated, surrender the certificate or certificates therefor (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft, or destruction of such certificate), at the office of the transfer agent for the Non-Voting Common Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent). Such notice shall state such holder's name or the names of the nominees in which such holder wishes the shares of Common Stock to be issued. If required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form reasonably satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing.

5.5.2 *Time of Conversion.* In the event of a conversion of a share or shares of Non-Voting Common Stock into a share or shares of Common Stock pursuant to Section A.5 of this Article IV, such conversion shall be deemed to have been made (a) in the event of a voluntary conversion pursuant to Section A.5.1 of this Article IV, at the close of business on the business day on which written notice of such voluntary conversion and, if applicable, certificates (or lost certificate affidavit and agreement) are received by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of the Corporation, (b) in the event of an automatic conversion upon a transfer or if any other event occurs, or any state of facts arises or exists, that would cause an automatic conversion pursuant to Section A.5.2 of this Article IV, immediately prior to the consummation of the transfer of such share or shares or at the time that such other event occurred, or state of facts arose, as

Table of Contents

applicable (such time of conversion in each case, the "*Conversion Time*"), and the share or shares of Common Stock issuable upon conversion of the specified share or shares of Non-Voting Common Stock shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time, (i) issue and deliver to such holder of Non-Voting Common Stock, or to his, her, or its nominees, a certificate or certificates for the number of shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Non-Voting Common Stock represented by the surrendered certificate that were not converted into Common Stock, and (ii) pay in cash such amount as provided in Section A.5.4 of this Article IV in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion.

5.5.3 *Reservation of Shares.* The Corporation shall, at all times when any shares of Non-Voting Common Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, solely for the purpose of effecting the conversion of the shares of the Non-Voting Common Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Non-Voting Common Stock into shares of Common Stock, taking into account any adjustment to such number of shares so issuable in accordance with Section A.5.5.8 of this Article IV. The Corporation shall take all such actions as may be necessary to assure that all such shares of Common Stock may be so issued to the registered holder(s) of the Non-Voting Common Stock being converted without violation of any applicable law or governmental regulation or any requirements of any domestic securities exchange upon which shares of Common Stock may be listed (except for official notice of issuance which shall be immediately delivered by the Corporation upon each such issuance). The Corporation shall not close its books against the transfer of any of its capital stock in any manner which would prevent the timely conversion of Non-Voting Common Stock into Common Stock.

5.5.4 *Effect of Conversion.* All shares of Non-Voting Common Stock that shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor and to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Section A.5.4 of this Article IV. Any shares of Non-Voting Common Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Non-Voting Common Stock accordingly. All shares of Common Stock issued in exchange for Non-Voting Common Stock pursuant to this Section A.5 of this Article IV shall be duly and validly issued, fully paid and nonassessable, free and clear of all taxes, liens, charges and encumbrances with respect to the issuance thereof.

5.5.6 *Taxes.* The Corporation shall pay any and all U.S. state or federal issue and other similar transfer taxes (not income taxes) that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Non-Voting Common Stock pursuant to this Section A.5 of this Article IV. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Non-Voting Common Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid

Table of Contents

to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

5.6. *Notices of Record Date.* In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Non-Voting Common Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security, or to vote at a stockholders' meeting;

(b) of any merger, consolidation, amalgamation or other business combination involving a capital reorganization of the Corporation (including any Change of Control) or any reclassification of the Common Stock of the Corporation; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Non-Voting Common Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or for such meeting, or (ii) the effective date on which such merger, consolidation, amalgamation, business combination, reorganization, reclassification, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Non-Voting Common Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such merger, consolidation, amalgamation, business combination, reorganization, reclassification, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Non-Voting Common Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date, as applicable, for the event specified in such notice.

5.7. *Equal Status.* Except as expressly provided in this Section A.5 of Article IV, shares of Common Stock and Non-Voting Common Stock shall have the same rights and privileges and rank equally, share ratably and be identical in all respect as to all matters. In any merger, consolidation, reorganization or other business combination, the consideration received per share by the holders of the Common Stock and the holders of the Non-Voting Common Stock in such merger, consolidation, reorganization or other business combination shall be identical in all respects; *provided, however*, that if such consideration consists, in whole or in part, of shares of capital stock of, or other equity interests in, the Corporation or any other corporation, partnership, limited liability company or other entity, then the powers, designations, preferences and relative, common, participating, optional or other special rights and qualifications, limitations and restrictions of such shares of capital stock or other equity interests may differ to the extent that the powers, designations, preferences and relative, common, participating, optional or other special rights and qualifications, limitations and restrictions of the Common Stock and Non-Voting Common Stock differ as provided herein (including, without limitation, with respect to the voting rights and conversion provisions hereof); and *provided further*, that, if the holders of the Common Stock or the holders of the Non-Voting Common Stock are granted the right to elect to receive one of two or more alternative forms of consideration, the foregoing provision shall be deemed satisfied if holders of the other class are granted identical election rights. Any consideration to be paid to or received by holders of Common Stock pursuant to any employment, consulting, severance, non-competition or other similar arrangement approved by the Board of Directors, or any duly

Table of Contents

authorized committee thereof, in their capacities as directors, officers, employees or consultants of the Corporation, and not in their capacity as a holder of Common Stock, shall not be considered to be "consideration received per share" for purposes of the foregoing provision, regardless of whether such consideration is paid in connection with, or conditioned upon the completion of, such merger, consolidation, reorganization or other business combination.

5.8 Adjustment. If the Corporation shall, at any time or from time to time subdivide (by any stock split, recapitalization or otherwise) its outstanding shares of Common Stock into a greater number of shares, the number of shares of Common Stock issuable upon any conversion of Non-Voting Common Stock pursuant to Section A.5.5 of this Article IV in effect immediately prior to any such subdivision shall be proportionately increased. If the Corporation at any time combines (by combination, reverse stock split or otherwise) its outstanding shares of Common Stock into a smaller number of shares, the number of shares of Common Stock issuable upon any conversion of Non-Voting Common Stock pursuant to Section A.5.5 of this Article IV in effect immediately prior to any such combination shall be proportionately decreased. Any adjustment under this Section A.5.8 of this Article IV shall become effective at the close of business on the date such subdivision or combination becomes effective. As promptly as reasonably practicable following any adjustment pursuant to this Section A.5.8 of this Article IV, the Corporation shall furnish to each holder of shares of Non-Voting Common Stock at the address specified for such holder in the books and records of the Corporation (or at such other address as may be provided to the Corporation in writing by such holder) a certificate of an executive officer setting forth in reasonable detail such adjustment and the facts upon which it is based and certifying the calculation thereof.

B. PREFERRED STOCK

Preferred Stock may be issued from time to time in one or more series, each of such series to have such terms as stated or expressed herein or in the resolution or resolutions adopted by the Board of Directors of the Corporation as hereinafter provided.

Authority is hereby expressly granted to the Board of Directors from time to time to issue the Preferred Stock in one or more series, and in connection with the creation of any such series, by adopting a resolution or resolutions providing for the issuance of the shares thereof and by filing a certificate of designations relating thereto in accordance with the DGCL, to determine and fix the number of shares of such series and such voting powers, full or limited, or no voting powers, and such other powers, designations, preferences and relative, participating, optional or other rights, and qualifications, limitations or restrictions thereof, including without limitation thereof, dividend rights, conversion rights, redemption privileges and liquidation preferences, all to the fullest extent now or hereafter permitted by the DGCL. Without limiting the generality of the foregoing, but subject to the rights of any series of Preferred Stock then outstanding, the resolution or resolutions providing for the issuance of any series of Preferred Stock may provide that such series shall be superior or rank equally or be junior to any other series of Preferred Stock to the extent permitted by law. The Board of Directors is further authorized to increase (but not above the total number of authorized shares of the class) or decrease (but not below the number of shares of any such series then outstanding) the number of shares of any series, the number of which was fixed by it, subsequent to the issuance of shares of such series then outstanding, subject to the powers, preferences and rights, and the qualifications, limitations and restrictions thereof stated in this Third Restated Certificate or the resolution of the Board of Directors originally fixing the number of shares of such series. If the number of shares of any series is so decreased, then the Corporation shall take all such steps as are necessary to cause the shares constituting such decrease to resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.

Table of Contents

Except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Third Restated Certificate (including any certificate of designation filed with respect to any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together as a class with the holders of one or more other such series, to vote thereon by law or pursuant to this Third Restated Certificate (including any certificate of designation filed with respect to any series of Preferred Stock).

ARTICLE V

Except as otherwise provided herein, the Corporation reserves the right to amend, alter, change or repeal any provision contained in this Third Restated Certificate, in the manner now or hereafter prescribed by statute and this Third Restated Certificate, and all rights conferred upon stockholders herein are granted subject to this reservation.

ARTICLE VI

In furtherance and not in limitation of the powers conferred upon it by the DGCL, and subject to the terms of any series of Preferred Stock, the Board of Directors shall have the power to adopt, amend, alter or repeal the bylaws of the Corporation ("*Bylaws*"). The stockholders may not adopt, amend, alter or repeal the Bylaws, or adopt any provision inconsistent therewith, unless such action is approved, in addition to any other vote required by this Third Restated Certificate, by the affirmative vote of the holders of at least seventy-five percent (75%) in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon; *provided, however*, that if the Board of Directors recommends that stockholders approve such amendment or repeal at a meeting of stockholders, such amendment or repeal shall only require the affirmative vote of the majority of the outstanding voting securities of the Corporation entitled to vote on such amendment or repeal, voting together as a single class. No Bylaw hereafter legally adopted, amended, altered or repealed shall invalidate any prior act of the directors or officers of the Corporation that would have been valid if such Bylaw had not been adopted, amended, altered or repealed. Notwithstanding any other provisions of law, this Third Restated Certificate or the Bylaws, and notwithstanding the fact that a lesser percentage may be specified by law, (a) the affirmative vote of the holders of at least seventy-five percent (75%) in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon shall be required to amend or repeal, or to adopt any provision inconsistent with this Article VI, and (b) for so long as any shares of Non-Voting Common Stock are outstanding, the affirmative vote of the holders of a majority of the outstanding shares of Non-Voting Common Stock shall be required to amend or repeal, to adopt any provision inconsistent with, or to otherwise alter (i) any of the powers, privileges and rights of the Non-Voting Common Stock set forth in Section A of Article IV or (ii) this clause (b) of this Article VI.

ARTICLE VII

This Article VII is inserted for the management of the business and for the conduct of the affairs of the Corporation.

1. *General Powers.* The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors.

2. *Number of Directors; Election of Directors.* Subject to the rights of the holders of any series of Preferred Stock to elect directors, the number of directors of the Corporation shall be established from time to time exclusively by the Board of Directors. Election of directors need not be by written ballot, except as and to the extent provided in the Bylaws.

Table of Contents

3. *Classes of Directors.* Subject to the rights of the holders of any series of Preferred Stock to elect directors, the Board of Directors shall be and is divided into three classes, designated as Class I, Class II and Class III. The Board of Directors is authorized to assign members of the Board of Directors to Class I, Class II or Class III, with such assignments to be or become effective upon the effectiveness of this Third Restated Certificate.

4. *Terms of Office.* Subject to the rights of the holders of any series of Preferred Stock to elect directors, each director shall serve for a term ending on the date of the third annual meeting of stockholders following the annual meeting of stockholders at which such director was elected; provided that each director shall continue to serve as a director until the election and qualification of his or her successor or until his or her earlier death, resignation or removal.

5. *Quorum.* Subject to the terms of any series of Preferred Stock then outstanding, the greater of (a) a majority of the directors then in office and (b) one-third of the number of directors fixed pursuant to Section 2 of this Article VII shall constitute a quorum of the Board of Directors. If at any meeting of the Board of Directors there shall be less than such a quorum, a majority of the directors present may adjourn the meeting from time to time without further notice other than announcement at the meeting, until a quorum shall be present.

6. *Action at Meeting.* Every act or decision done or made by a majority of the directors present at a meeting duly held at which a quorum is present shall be regarded as the act of the Board of Directors unless a greater number is required by law or by this Third Restated Certificate.

7. *Removal.* Subject to the rights of the holders of any series of Preferred Stock, directors of the Corporation may be removed only for cause and only by the affirmative vote of the holders of at least seventy-five percent (75%) in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon.

8. *Vacancies.* Subject to the rights of the holders of any series of Preferred Stock, any vacancy or newly created directorship in the Board of Directors, however occurring, shall be filled only by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director and shall not be filled by the stockholders, unless the Board of Directors determines by resolution that any such vacancy or newly created directorship shall be filled by the stockholders. A director elected to fill a vacancy shall serve for a term expiring at the next election of the class for which such director shall have been chosen and shall remain in office until the election and qualification of a successor or such director's earlier death, resignation or removal.

9. *Stockholder Nominations and Introduction of Business, Etc.* Advance notice of stockholder nominations for election of directors and other business to be brought by stockholders before a meeting of stockholders shall be given in the manner provided by the Bylaws.

10. *Amendments to Article VII.* Notwithstanding any other provisions of law, this Third Restated Certificate or the Bylaws, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least seventy-five percent (75%) in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article VII.

ARTICLE VIII

Subject to the rights of any series of Preferred Stock then outstanding, stockholders of the Corporation may not take any action by written consent in lieu of a meeting and may only take action at an annual or special meeting of the stockholders. Notwithstanding any other provisions of law, this Third Restated Certificate or the Bylaws, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least seventy-five percent (75%) in voting

Table of Contents

power of the outstanding shares of capital stock of the Corporation entitled to vote thereon shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article VIII.

ARTICLE IX

Special meetings of stockholders for any purpose or purposes may be called at any time only by the Board of Directors, the chairperson of the Board of Directors, the chief executive officer or the president (in the absence of a chief executive officer), and subject to the rights of any series of Preferred Stock then outstanding, may not be called by any other person or persons. The Board of Directors may cancel, postpone or reschedule any previously scheduled special meeting at any time, before or after the notice for such meeting has been sent to the stockholders. Only such business shall be considered at a special meeting of stockholders as shall have been stated in the notice for such meeting. Business transacted at any special meeting of stockholders shall be limited to the purpose or purposes stated in the notice of meeting. Notwithstanding any other provisions of law, this Third Restated Certificate or the Bylaws, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least seventy-five percent (75%) in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article IX.

ARTICLE X

Except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment or repeal. If the DGCL is amended to permit further elimination or limitation of the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL as so amended.

ARTICLE XI

The following indemnification provisions shall apply to the persons enumerated below:

1. *Right to Indemnification of Directors and Officers.* The Corporation shall indemnify, to the fullest extent permitted by applicable law, any director or officer of the Corporation who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a "*Proceeding*") by reason of the fact that he or she is or was a director, officer, employee or agent of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any such Proceeding. The Corporation shall be required to indemnify a person in connection with a Proceeding initiated by such person only if the Proceeding was authorized by the Board of Directors.

2. *Indemnification of Employees and Agents.* The Corporation shall have the power to indemnify, to the extent permitted by applicable law, any employee or agent of the Corporation who was or is a party or is threatened to be made a party to any Proceeding by reason of the fact that he or she is or was a director, officer, employee or agent of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against expenses

Table of Contents

(including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any such Proceeding.

3. *Amendment or Repeal.* Neither any amendment nor repeal of any Section of this Article XI, nor the adoption of any provision of this Third Restated Certificate or any provision of the Bylaws inconsistent with this Article XI, shall eliminate or reduce the effect of this Article XI in respect of any matter occurring, or any cause of action, suit, claim or proceeding accruing or arising or that, but for this Article XI, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

ARTICLE XII

The Corporation renounces any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An "*Excluded Opportunity*" is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of, (a) any director of the Corporation who is not an employee or consultant of the Corporation or any of its subsidiaries, or (b) any holder of Preferred Stock or any partner, member, director, stockholder, employee or agent of any such holder, other than someone who is an employee or consultant of the Corporation or any of its subsidiaries (collectively, "*Covered Persons*"), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation.

ARTICLE XIII

Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (A) any derivative action or proceeding brought on behalf of the Corporation, (B) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (C) any action or proceeding asserting a claim arising pursuant to any provision of the DGCL or the Third Restated Certificate or Bylaws, or (D) any action or proceeding asserting a claim governed by the internal affairs doctrine.

ARTICLE XIV

In the event that all, some or any part of any provision contained in this Third Restated Certificate shall be found by any court of competent jurisdiction to be illegal, invalid or unenforceable (as against public policy or otherwise), such provision shall be enforced to the fullest extent permitted by law and shall be construed as if it had been narrowed only to the extent necessary so as not to be invalid, illegal or unenforceable; the validity, legality and enforceability of the remaining provisions of this Third Restated Certificate shall continue in full force and effect and shall not be affected or impaired by such illegality, invalidity or unenforceability of any other provision (or any part or parts thereof) of this Third Restated Certificate. If and to the extent that any provision contained in this Third Restated Certificate violates any rule of a securities exchange or automated quotation system on which securities of the Corporation are traded, the Board of Directors is authorized, in its sole discretion, to suspend or terminate such provision for such time or periods of time and subject to such conditions as the Board of Directors shall determine in its sole discretion. The Corporation reserves the right to amend or repeal any provision contained in this Third Restated Certificate in the manner prescribed by the laws of the State of Delaware and all rights conferred upon stockholders are granted subject to this reservation; *provided, however*, that notwithstanding any other provision of this Third Restated Certificate or any provision of law that might otherwise permit a lesser vote or no vote, the Board of Directors acting pursuant to a resolution adopted by a majority of the Board of Directors shall be required for any amendment, repeal or modification of any provision or Article herein that requires the

Table of Contents

affirmative vote of at least seventy-five percent (75%) of the then outstanding voting securities of the Corporation, voting together as a single class.

ARTICLE XV

Meetings of stockholders may be held within or outside of the State of Delaware, as the Bylaws may provide. The books of the Corporation may be kept (subject to any provision contained in the DGCL) outside of the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws.

B-11

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

IN WITNESS WHEREOF, this Third Amended and Restated Certificate of Incorporation, which amends, restates and integrates the Corporation's existing second amended and restated certificate of incorporation, (a) was duly adopted in accordance with Sections 242 and 245 of the DGCL, (b) was duly approved by the written consent of the stockholders of the Corporation in accordance with Section 228 of the DGCL, and (c) has been executed by the Corporation's duly authorized officer on _____, 2017.

JAGUAR HEALTH, INC.

By:

Name: Karen S. Wright
Title: *Chief Financial Officer*

B-12

Table of Contents

Annex C

March 28, 2017

Board of Directors
Jaguar Animal Health, Inc.
201 Mission Street, Suite 2375
San Francisco, California 94105

Members of the Board:

Stifel, Nicolaus & Company, Incorporated ("Stifel" or "we") has been advised that Jaguar Animal Health, Inc. ("Parent") is considering entering into an Agreement and Plan of Merger (the "Merger Agreement") with Napo Acquisition Corporation, a Delaware corporation and wholly-owned subsidiary of Parent ("Merger Sub"), Napo Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and Greg Stock, as the Company Representative (terms used herein without definition having the meanings ascribed to them in the Merger Agreement). We have been advised that, pursuant to the Merger Agreement and certain related agreements, Parent will acquire all of the issued and outstanding equity interests of the Company, and certain debt and liabilities of the Company will be restructured, in accordance with the following transactions:

(a) Merger Sub will be merged with and into the Company, with the Company continuing as the surviving corporation and a wholly-owned subsidiary of Parent (the "Merger"), in connection with which each issued and outstanding share of Company Common Stock will be converted into certain rights to receive shares of Parent Common Stock, and each issued and outstanding Company Warrant, Company RSU and Company Option will be converted into a Parent Warrant, Parent RSU and Parent Option, all on terms and conditions more fully set forth in the Merger Agreement; and

(b) Parent will issue shares of Parent Common Stock, shares of convertible non-voting common stock of Parent ("Parent Non-Voting Common Stock"), Parent Warrants, Parent RSUs and Parent Options to certain equity holders, debt holders and trade creditors of the Company in exchange for such equity and complete settlement of such debt and liabilities, issue and sell shares of Parent Common Stock for a cash payment and lend the resulting proceeds to the Company, and issue, for a cash payment or exchange of convertible notes of the Company, notes convertible into shares of Parent Common Stock (such notes, collectively, the "Convertible Notes" and all such transactions, collectively with the Merger, the "Transaction").

We have also been advised that the shares of Parent Common Stock and shares of Parent Non-Voting Common Stock to be issued or potentially issuable by Parent in the Transaction (including, without limitation, shares issuable upon conversion of the Convertible Notes and upon any exercise of or otherwise pursuant to Parent Warrants, Parent RSUs and Parent Options issued in the Transaction) will total, in the aggregate, 69,299,346 shares of Parent Common Stock and Parent Non-Voting Common Stock (such number of shares, the "Transaction Consideration").

The Board of Directors of Parent (the "Board") has requested Stifel's opinion, as investment bankers, as to the fairness, from a financial point of view and as of the date hereof, to Parent of the Transaction Consideration to be issued in the Transaction (the "Opinion").

In rendering our Opinion, we have, among other things:

- (i) reviewed the financial terms contained in a draft received on March 28, 2017 of the Merger Agreement;
- (ii) reviewed certain publicly available information and data concerning Parent, including audited consolidated financial statements of Parent contained in its Annual Reports on Form 10-K for

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

- the three years ended December 31, 2016 and certain relevant historical financial and operating data concerning Parent furnished to us by the management of Parent;
- (iii) reviewed certain non-publicly available financial analyses, financial projections, reports and other information concerning Parent furnished to us by the management of Parent, including projections for Parent reflecting the probability of technical success determined by the management of Parent (the "Parent Projections"), and utilized per instruction of Parent;
 - (iv) reviewed certain publicly available information and data concerning the Company and certain non-publicly available information and data concerning the Company furnished to us by the management of Parent, including audited consolidated financial statements of the Company for the year ended December 31, 2016, and certain financial analyses, financial projections, reports and other information concerning the Company furnished to us by the management of Parent, including projections for the Company reflecting the probability of technical success determined by the management of Parent (the "Company Projections"), and utilized per instruction of Parent;
 - (v) reviewed pro-forma projections for Parent and the Company giving effect to the Transaction and reflecting the probabilities of technical success determined by the management of Parent (the "Pro Forma Projections"), provided by the management of Parent;
 - (vi) reviewed a pro forma balance sheet of Parent and the Company giving effect to the Transaction (the "Pro Forma Balance Sheet"), provided by the management of Parent;
 - (vii) discussed with the management of Parent the historical and current business operations, financial condition and prospects of each of Parent and the Company and such other matters as we deemed relevant;
 - (viii) held discussions with the management of Parent regarding the potential effects of the Transaction, including the pro forma financial impact of the Merger on Parent and the Company;
 - (ix) reviewed and analyzed certain operating results and projections of each of Parent and the Company as compared to operating results, projections, reported prices and trading histories of certain publicly traded companies that we deemed relevant;
 - (x) reviewed and analyzed certain financial terms of the Transaction as compared to the publicly available financial terms of certain selected merger and acquisition transactions that we deemed relevant to our analysis;
 - (xi) reviewed and analyzed, based on the Parent Projections, the cash flows generated by Parent on a stand-alone basis to determine the present value of the discounted cash flows;
 - (xii) reviewed and analyzed, based on the Company Projections, the cash flows generated by the Company on a stand-alone basis to determine the present value of the discounted cash flows; and
 - (xiii) reviewed and analyzed such other information and such other factors, and conducted such other financial studies, analyses and investigations, as we deemed relevant for the purposes of our opinion. In addition, we took into account our assessment of general economic, market and financial conditions and our experience in other transactions, as well as our experience in securities valuations and our general knowledge of the industry in which both Parent and the Company operate.

In rendering our Opinion, we have, with your consent, relied upon and assumed, without independent verification, the accuracy and completeness of all of the financial and other information that was provided to Stifel by or on behalf of Parent, or that was otherwise reviewed by Stifel, and have

Table of Contents

not assumed any responsibility for independently verifying any of such information. With respect to the financial forecasts and projections supplied to us by Parent (including, without limitation, the Parent Projections, the Company Projections and the Pro Forma Projections), we have assumed, at the direction of Parent, that they were reasonably prepared on the basis reflecting the best currently available estimates and judgments of the management of Parent as to the future operating and financial performance of Parent and the Company, as applicable, and that they provided a reasonable basis upon which we could form our Opinion. Such forecasts and projections were not prepared with the expectation of public disclosure. All such forecasts and projections are based on numerous variables and assumptions that are inherently uncertain, including, without limitation, factors related to general economic and competitive conditions. Accordingly, actual results could vary significantly from those set forth in such forecasts and projections. Stifel has relied on these forecasts and projections without independent verification or analysis and does not in any respect assume any responsibility for the accuracy or completeness thereof. Stifel expresses no opinion as to the Parent Projections, the Company Projections, the Pro Forma Projections or any other estimates, forecasts or projections or the assumptions on which they were made. With respect to the Pro Forma Balance Sheet, we have assumed, at the direction of Parent, that it accurately reflects the pro forma combined balance sheet of Parent and the Company immediately after the closing of the Transaction. We have assumed, at the direction of Parent, that the Transaction Consideration consists of 69,299,346 shares, in the aggregate, of Parent Common Stock and Parent Non-Voting Common Stock (including, without limitation, shares of Parent Common Stock and Parent Non-Voting Common Stock issuable in respect of the Contingent Rights and upon conversion of the Convertible Notes) and that the Convertible Notes will be converted into Parent Common Stock at or immediately following the Closing Date. We have further assumed, at the direction of Parent, that each share of Parent Non-Voting Common Stock has the same value as a share of Parent Common Stock.

We also have assumed that there were no material changes in the assets, liabilities, financial condition, results of operations, business or prospects of either Parent or the Company since the date of the last financial statements of Parent and the Company made available to us. We did not make or obtain any independent evaluation, appraisal or physical inspection of either Parent's or the Company's assets or liabilities (contingent or otherwise), nor have we been furnished with any such evaluation or appraisal. Estimates of values of companies and assets do not purport to be appraisals or necessarily reflect the prices at which companies or assets may actually be sold. Because such estimates are inherently subject to uncertainty, Stifel assumes no responsibility for their accuracy.

We have assumed, with your consent, that there are no factors that would delay or subject to any adverse conditions any necessary regulatory or governmental approvals, consents, releases and waivers and that all conditions to the Transaction will be satisfied and not waived. In addition, we have assumed that the definitive Merger Agreement will not differ materially from the draft we reviewed. We have also assumed that the Transaction will be consummated substantially on the terms and conditions described in the Merger Agreement and by the management of Parent, without any waiver or modification of any material term or condition by Parent or any other party and without any adjustment to the Transaction Consideration, and that obtaining any necessary regulatory or other approvals, consents, releases and waivers or satisfying any other conditions for consummation of the Transaction will not have an adverse effect on Parent, the Company or the Transaction. We have assumed, in all respects material to our Opinion, that the representations and warranties of Parent, the Company and other parties contained in the Merger Agreement are true and correct and that all such parties will comply with each of their covenants in the Merger Agreement. We have assumed that the Transaction will be consummated in a manner that complies with the applicable provisions of the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, and all other applicable federal, state and foreign statutes, rules and regulations. We have further assumed that Parent has relied upon the advice of its counsel, independent accountants and other advisors (other

Table of Contents

than Stifel) as to all legal, financial reporting, tax, accounting and regulatory matters with respect to Parent, the Company, the Transaction, the Merger Agreement.

Our Opinion is limited to whether the Transaction Consideration to be issued by Parent in the Transaction is fair to Parent, from a financial point of view and as of the date hereof, and does not address any other terms, aspects or implications of the Transaction including, without limitation, the form or structure of the Merger or any other part of the Transaction, any individual transaction or group of transactions, or the terms, conditions or any other aspect of any individual transaction or group of transactions, that is or are part of the Transaction, any consequences of the Transaction on Parent, its stockholders, creditors or otherwise, or any terms, aspects or implications of any voting, support, stockholder or other agreements, arrangements or understandings contemplated or entered into in connection with the Transaction or otherwise, including without limitation any terms or conditions of any of the agreements relating to the issuance or potential issuance of shares of Parent Common Stock or Parent Non-Voting Common Stock included in the Transaction Consideration (including without limitation the terms or conditions of any Parent Warrants, Parent RSUs or Parent Options or of the Convertible Notes). Our Opinion also does not consider, address or include: (i) any other strategic alternatives currently (or which have been or may be) contemplated by the Board or Parent; (ii) the legal, financial reporting, tax, accounting or regulatory consequences of the Transaction on Parent or the holders of Parent Common Stock; (iii) the fairness of the amount or nature of any compensation to any of Parent's officers, directors or employees, or class of such persons, relative to the compensation to the holders of Parent's securities or otherwise; or (iv) the effect of the Transaction on, or the fairness of the consideration to be received by, holders of any class of securities of Parent, or any class of securities of any other party to the Transaction. Furthermore, we are not expressing any opinion herein as to the prices, trading range or volume at which Parent's securities will trade following public announcement or consummation of the Transaction.

Our Opinion is necessarily based on economic, market, financial and other conditions as they exist on, and on the information made available to us by or on behalf of Parent or its advisors, or information otherwise reviewed by Stifel, as of the date of this Opinion. It is understood that subsequent developments may affect the conclusion reached in this Opinion and that Stifel does not have any obligation to update, revise or reaffirm this Opinion. Our Opinion is for the information of, and directed to, the Board for its information and assistance in connection with its consideration of the financial terms of the Transaction. Our Opinion does not constitute a recommendation to the Board as to how the Board should vote or otherwise act with respect to the Transaction or any other matter, or to any stockholder of Parent or the Company as to how any such shareholder should vote or act with respect to the Transaction or any other matter, or whether or not any stockholder of Parent or the Company should enter into a voting, stockholders', or affiliates' or similar agreement with respect to the Transaction or exercise any dissenters', appraisal or similar rights that may be available to such shareholder. In addition, the Opinion does not compare the relative merits of the Transaction with any other alternative transactions or business strategies which may have been available to Parent and does not address the underlying business decision of the Board or Parent to proceed with or effect the Transaction.

We are not legal, tax, regulatory or bankruptcy advisors. We have not considered any potential legislative or regulatory changes currently being considered or recently enacted by the United States Congress, the various federal banking agencies, the Securities and Exchange Commission (the "SEC"), or any other regulatory bodies, or any changes in accounting methods or generally accepted accounting principles that may be adopted by the SEC or the Financial Accounting Standards Board, or any changes in regulatory accounting principles that may be adopted by any or all of the federal banking agencies. Our Opinion is not a solvency opinion and does not in any way address the solvency or financial condition of Parent or the Company.

Table of Contents

Stifel, as part of its investment banking services, is regularly engaged in the independent valuation of businesses and securities in connection with mergers, acquisitions, underwritings, sales and distributions of listed and unlisted securities, private placements and valuations for estate, corporate and other purposes. We have acted as financial advisor to Parent in connection with the Transaction and will receive a fee for our services, a portion of which is contingent upon the completion of the Transaction (the "Advisory Fee"). We also will earn a fee upon the delivery of this Opinion (the "Opinion Fee"), payable upon the earlier of the consummation of the Merger and the date that is 90 days following the date hereof, provided that such Opinion Fee is creditable against any Advisory Fee. We will not receive any other significant payment or compensation contingent upon the successful consummation of the Transaction. In addition, Parent has agreed to indemnify us for certain liabilities arising out of our engagement. Stifel may seek to provide investment banking services to Parent or its affiliates in the future, for which we would seek customary compensation. In the ordinary course of business, Stifel and our clients may transact in the equity securities of each of Parent and the Company and may at any time hold a long or short position in such securities.

Stifel's Fairness Opinion Committee has approved the issuance of this Opinion. Our Opinion may not be published or otherwise used or referred to, nor shall any public reference to Stifel be made, without our prior written consent.

Based upon and subject to the foregoing, we are of the opinion that, as of the date hereof, the Transaction Consideration to be issued by Parent in the Transaction is fair to Parent, from a financial point of view.

Very truly yours,

/s/ STIFEL, NICOLAUS & COMPANY, INCORPORATED

STIFEL, NICOLAUS & COMPANY, INCORPORATED

SECTION 262 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE

§ 262 Appraisal rights

(a) Any stockholder of a corporation of this State who holds shares of stock on the date of the making of a demand pursuant to subsection (d) of this section with respect to such shares, who continuously holds such shares through the effective date of the merger or consolidation, who has otherwise complied with subsection (d) of this section and who has neither voted in favor of the merger or consolidation nor consented thereto in writing pursuant to § 228 of this title shall be entitled to an appraisal by the Court of Chancery of the fair value of the stockholder's shares of stock under the circumstances described in subsections (b) and (c) of this section. As used in this section, the word "stockholder" means a holder of record of stock in a corporation; the words "stock" and "share" mean and include what is ordinarily meant by those words; and the words "depository receipt" mean a receipt or other instrument issued by a depository representing an interest in 1 or more shares, or fractions thereof, solely of stock of a corporation, which stock is deposited with the depository.

(b) Appraisal rights shall be available for the shares of any class or series of stock of a constituent corporation in a merger or consolidation to be effected pursuant to § 251 (other than a merger effected pursuant to § 251(g) of this title and, subject to paragraph (b)(3) of this section, § 251(h) of this title), § 252, § 254, § 255, § 256, § 257, § 258, § 263 or § 264 of this title:

(1) Provided, however, that, except as expressly provided in § 363(b) of this title, no appraisal rights under this section shall be available for the shares of any class or series of stock, which stock, or depository receipts in respect thereof, at the record date fixed to determine the stockholders entitled to receive notice of the meeting of stockholders to act upon the agreement of merger or consolidation, were either: (i) listed on a national securities exchange or (ii) held of record by more than 2,000 holders; and further provided that no appraisal rights shall be available for any shares of stock of the constituent corporation surviving a merger if the merger did not require for its approval the vote of the stockholders of the surviving corporation as provided in § 251(f) of this title.

(2) Notwithstanding paragraph (b)(1) of this section, appraisal rights under this section shall be available for the shares of any class or series of stock of a constituent corporation if the holders thereof are required by the terms of an agreement of merger or consolidation pursuant to §§ 251, 252, 254, 255, 256, 257, 258, 263 and 264 of this title to accept for such stock anything except:

- a. Shares of stock of the corporation surviving or resulting from such merger or consolidation, or depository receipts in respect thereof;
- b. Shares of stock of any other corporation, or depository receipts in respect thereof, which shares of stock (or depository receipts in respect thereof) or depository receipts at the effective date of the merger or consolidation will be either listed on a national securities exchange or held of record by more than 2,000 holders;
- c. Cash in lieu of fractional shares or fractional depository receipts described in the foregoing paragraphs (b)(2)a. and b. of this section; or
- d. Any combination of the shares of stock, depository receipts and cash in lieu of fractional shares or fractional depository receipts described in the foregoing paragraphs (b)(2)a., b. and c. of this section.

(3) In the event all of the stock of a subsidiary Delaware corporation party to a merger effected under § 251(h), § 253 or § 267 of this title is not owned by the parent immediately prior

Table of Contents

to the merger, appraisal rights shall be available for the shares of the subsidiary Delaware corporation.

(4) In the event of an amendment to a corporation's certificate of incorporation contemplated by § 363(a) of this title, appraisal rights shall be available as contemplated by § 363(b) of this title, and the procedures of this section, including those set forth in subsections (d) and (e) of this section, shall apply as nearly as practicable, with the word "amendment" substituted for the words "merger or consolidation," and the word "corporation" substituted for the words "constituent corporation" and/or "surviving or resulting corporation."

(c) Any corporation may provide in its certificate of incorporation that appraisal rights under this section shall be available for the shares of any class or series of its stock as a result of an amendment to its certificate of incorporation, any merger or consolidation in which the corporation is a constituent corporation or the sale of all or substantially all of the assets of the corporation. If the certificate of incorporation contains such a provision, the procedures of this section, including those set forth in subsections (d) and (e) of this section, shall apply as nearly as is practicable.

(d) Appraisal rights shall be perfected as follows:

(1) If a proposed merger or consolidation for which appraisal rights are provided under this section is to be submitted for approval at a meeting of stockholders, the corporation, not less than 20 days prior to the meeting, shall notify each of its stockholders who was such on the record date for notice of such meeting (or such members who received notice in accordance with § 255(c) of this title) with respect to shares for which appraisal rights are available pursuant to subsection (b) or (c) of this section that appraisal rights are available for any or all of the shares of the constituent corporations, and shall include in such notice a copy of this section and, if 1 of the constituent corporations is a nonstock corporation, a copy of § 114 of this title. Each stockholder electing to demand the appraisal of such stockholder's shares shall deliver to the corporation, before the taking of the vote on the merger or consolidation, a written demand for appraisal of such stockholder's shares. Such demand will be sufficient if it reasonably informs the corporation of the identity of the stockholder and that the stockholder intends thereby to demand the appraisal of such stockholder's shares. A proxy or vote against the merger or consolidation shall not constitute such a demand. A stockholder electing to take such action must do so by a separate written demand as herein provided. Within 10 days after the effective date of such merger or consolidation, the surviving or resulting corporation shall notify each stockholder of each constituent corporation who has complied with this subsection and has not voted in favor of or consented to the merger or consolidation of the date that the merger or consolidation has become effective; or

(2) If the merger or consolidation was approved pursuant to § 228, § 251(h), § 253, or § 267 of this title, then either a constituent corporation before the effective date of the merger or consolidation or the surviving or resulting corporation within 10 days thereafter shall notify each of the holders of any class or series of stock of such constituent corporation who are entitled to appraisal rights of the approval of the merger or consolidation and that appraisal rights are available for any or all shares of such class or series of stock of such constituent corporation, and shall include in such notice a copy of this section and, if 1 of the constituent corporations is a nonstock corporation, a copy of § 114 of this title. Such notice may, and, if given on or after the effective date of the merger or consolidation, shall, also notify such stockholders of the effective date of the merger or consolidation. Any stockholder entitled to appraisal rights may, within 20 days after the date of mailing of such notice or, in the case of a merger approved pursuant to § 251(h) of this title, within the later of the consummation of the tender or exchange offer contemplated by § 251(h) of this title and 20 days after the date of mailing of such notice, demand in writing from the surviving or resulting corporation the appraisal of such holder's shares. Such

Table of Contents

demand will be sufficient if it reasonably informs the corporation of the identity of the stockholder and that the stockholder intends thereby to demand the appraisal of such holder's shares. If such notice did not notify stockholders of the effective date of the merger or consolidation, either (i) each such constituent corporation shall send a second notice before the effective date of the merger or consolidation notifying each of the holders of any class or series of stock of such constituent corporation that are entitled to appraisal rights of the effective date of the merger or consolidation or (ii) the surviving or resulting corporation shall send such a second notice to all such holders on or within 10 days after such effective date; provided, however, that if such second notice is sent more than 20 days following the sending of the first notice or, in the case of a merger approved pursuant to § 251(h) of this title, later than the later of the consummation of the tender or exchange offer contemplated by § 251(h) of this title and 20 days following the sending of the first notice, such second notice need only be sent to each stockholder who is entitled to appraisal rights and who has demanded appraisal of such holder's shares in accordance with this subsection. An affidavit of the secretary or assistant secretary or of the transfer agent of the corporation that is required to give either notice that such notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein. For purposes of determining the stockholders entitled to receive either notice, each constituent corporation may fix, in advance, a record date that shall be not more than 10 days prior to the date the notice is given, provided, that if the notice is given on or after the effective date of the merger or consolidation, the record date shall be such effective date. If no record date is fixed and the notice is given prior to the effective date, the record date shall be the close of business on the day next preceding the day on which the notice is given.

(e) Within 120 days after the effective date of the merger or consolidation, the surviving or resulting corporation or any stockholder who has complied with subsections (a) and (d) of this section hereof and who is otherwise entitled to appraisal rights, may commence an appraisal proceeding by filing a petition in the Court of Chancery demanding a determination of the value of the stock of all such stockholders. Notwithstanding the foregoing, at any time within 60 days after the effective date of the merger or consolidation, any stockholder who has not commenced an appraisal proceeding or joined that proceeding as a named party shall have the right to withdraw such stockholder's demand for appraisal and to accept the terms offered upon the merger or consolidation. Within 120 days after the effective date of the merger or consolidation, any stockholder who has complied with the requirements of subsections (a) and (d) of this section hereof, upon written request, shall be entitled to receive from the corporation surviving the merger or resulting from the consolidation a statement setting forth the aggregate number of shares not voted in favor of the merger or consolidation and with respect to which demands for appraisal have been received and the aggregate number of holders of such shares. Such written statement shall be mailed to the stockholder within 10 days after such stockholder's written request for such a statement is received by the surviving or resulting corporation or within 10 days after expiration of the period for delivery of demands for appraisal under subsection (d) of this section hereof, whichever is later. Notwithstanding subsection (a) of this section, a person who is the beneficial owner of shares of such stock held either in a voting trust or by a nominee on behalf of such person may, in such person's own name, file a petition or request from the corporation the statement described in this subsection.

(f) Upon the filing of any such petition by a stockholder, service of a copy thereof shall be made upon the surviving or resulting corporation, which shall within 20 days after such service file in the office of the Register in Chancery in which the petition was filed a duly verified list containing the names and addresses of all stockholders who have demanded payment for their shares and with whom agreements as to the value of their shares have not been reached by the surviving or resulting corporation. If the petition shall be filed by the surviving or resulting corporation, the petition shall be accompanied by such a duly verified list. The Register in Chancery, if so ordered by the Court, shall give notice of the time and place fixed for the hearing of such petition by registered or certified mail to

Table of Contents

the surviving or resulting corporation and to the stockholders shown on the list at the addresses therein stated. Such notice shall also be given by 1 or more publications at least 1 week before the day of the hearing, in a newspaper of general circulation published in the City of Wilmington, Delaware or such publication as the Court deems advisable. The forms of the notices by mail and by publication shall be approved by the Court, and the costs thereof shall be borne by the surviving or resulting corporation.

(g) At the hearing on such petition, the Court shall determine the stockholders who have complied with this section and who have become entitled to appraisal rights. The Court may require the stockholders who have demanded an appraisal for their shares and who hold stock represented by certificates to submit their certificates of stock to the Register in Chancery for notation thereon of the pendency of the appraisal proceedings; and if any stockholder fails to comply with such direction, the Court may dismiss the proceedings as to such stockholder.

(h) After the Court determines the stockholders entitled to an appraisal, the appraisal proceeding shall be conducted in accordance with the rules of the Court of Chancery, including any rules specifically governing appraisal proceedings. Through such proceeding the Court shall determine the fair value of the shares exclusive of any element of value arising from the accomplishment or expectation of the merger or consolidation, together with interest, if any, to be paid upon the amount determined to be the fair value. In determining such fair value, the Court shall take into account all relevant factors. Unless the Court in its discretion determines otherwise for good cause shown, interest from the effective date of the merger through the date of payment of the judgment shall be compounded quarterly and shall accrue at 5% over the Federal Reserve discount rate (including any surcharge) as established from time to time during the period between the effective date of the merger and the date of payment of the judgment. Upon application by the surviving or resulting corporation or by any stockholder entitled to participate in the appraisal proceeding, the Court may, in its discretion, proceed to trial upon the appraisal prior to the final determination of the stockholders entitled to an appraisal. Any stockholder whose name appears on the list filed by the surviving or resulting corporation pursuant to subsection (f) of this section and who has submitted such stockholder's certificates of stock to the Register in Chancery, if such is required, may participate fully in all proceedings until it is finally determined that such stockholder is not entitled to appraisal rights under this section.

(i) The Court shall direct the payment of the fair value of the shares, together with interest, if any, by the surviving or resulting corporation to the stockholders entitled thereto. Payment shall be so made to each such stockholder, in the case of holders of uncertificated stock forthwith, and in the case of holders of shares represented by certificates upon the surrender to the corporation of the certificates representing such stock. The Court's decree may be enforced as other decrees in the Court of Chancery may be enforced, whether such surviving or resulting corporation be a corporation of this State or of any state.

(j) The costs of the proceeding may be determined by the Court and taxed upon the parties as the Court deems equitable in the circumstances. Upon application of a stockholder, the Court may order all or a portion of the expenses incurred by any stockholder in connection with the appraisal proceeding, including, without limitation, reasonable attorney's fees and the fees and expenses of experts, to be charged pro rata against the value of all the shares entitled to an appraisal.

(k) From and after the effective date of the merger or consolidation, no stockholder who has demanded appraisal rights as provided in subsection (d) of this section shall be entitled to vote such stock for any purpose or to receive payment of dividends or other distributions on the stock (except dividends or other distributions payable to stockholders of record at a date which is prior to the effective date of the merger or consolidation); provided, however, that if no petition for an appraisal shall be filed within the time provided in subsection (e) of this section, or if such stockholder shall deliver to the surviving or resulting corporation a written withdrawal of such stockholder's demand for

Table of Contents

an appraisal and an acceptance of the merger or consolidation, either within 60 days after the effective date of the merger or consolidation as provided in subsection (e) of this section or thereafter with the written approval of the corporation, then the right of such stockholder to an appraisal shall cease. Notwithstanding the foregoing, no appraisal proceeding in the Court of Chancery shall be dismissed as to any stockholder without the approval of the Court, and such approval may be conditioned upon such terms as the Court deems just; provided, however that this provision shall not affect the right of any stockholder who has not commenced an appraisal proceeding or joined that proceeding as a named party to withdraw such stockholder's demand for appraisal and to accept the terms offered upon the merger or consolidation within 60 days after the effective date of the merger or consolidation, as set forth in subsection (e) of this section.

(l) The shares of the surviving or resulting corporation to which the shares of such objecting stockholders would have been converted had they assented to the merger or consolidation shall have the status of authorized and unissued shares of the surviving or resulting corporation.

**ILLUSTRATIVE EXAMPLES CALCULATING THE SHARES OF JAGUAR COMMON STOCK
ISSUABLE TO HOLDERS OF CONTINGENT RIGHTS**

The following examples of the calculation of the Merger Shares are for illustration purposes only. The number of shares of Jaguar common stock set forth in these examples (e.g., the number of Tranche A Shares, the number of Tranche B Shares and the fixed number of shares of Jaguar common stock issuable under the Jaguar RSUs held by the RSU Indemnitors) are for illustration purposes and may differ from the actual numbers. The actual calculation of the Merger Shares shall be made by Jaguar in its reasonable discretion in accordance with the Merger Agreement. In the event of a conflict between these examples and the Merger Agreement, the Merger Agreement shall control.

Example 1. Pursuant to the Investor Rights Agreement, on the Closing Date, 17,000,000 Tranche A Shares and 20,000,000 Tranche B Shares are issued to Nantucket; the 20,000,000 Tranche B Shares are placed in escrow. Prior to the Closing Date, and pursuant to Section 2.2(a)(i) of the Merger Agreement, Napo delivers to Jaguar the Company Stock Record which states that the maximum number of shares of Jaguar common stock the contingent right holders as a group may be entitled to receive is 20,000,000. At the Effective Time, the Napo RSUs held by the Napo RSU holders (including the RSU Indemnitors) are converted into Jaguar RSUs pursuant to which the total fixed number of shares of Jaguar common stock issuable is 5,500,000; with respect to the Jaguar RSUs held by the RSU Indemnitors, the total fixed number of shares issuable is 5,000,000. Assume no claims for indemnification are made by the Parent Indemnitees during the Survival Period. On the date on which the Survival Period ends, Nantucket sells all of the Tranche A Shares and 10,000,000 of the Tranche B Shares in order to reach the Hurdle. The remaining 10,000,000 Tranche B Shares are delivered by the Escrow Agent to the Exchange Agent for issuance to the contingent right holders.

Pursuant to Section 3.2 of the RSU Agreements, the RSU Indemnitors' aggregate Pro Rata Portion of the 10,000,000 Tranche B Shares that were delivered to Nantucket is calculated as follows: $10,000,000 \times [5,000,000 / (20,000,000 + 5,000,000)] = 2,000,000$. Therefore, the RSU Indemnitors as a group will forfeit their right to 2,000,000 shares of Jaguar common stock. On the Final Determination Date, Jaguar will issue 2,000,000 shares of Jaguar common stock to the contingent right holders in accordance with the RSU Agreements.

As a result of the foregoing, the total number of Merger Shares to be distributed to the contingent right holders is 12,000,000, consisting of (i) the remaining 10,000,000 Tranche B Shares in escrow that the Escrow Agent delivered to the Exchange Agent pursuant to the Investor Rights Agreement, plus (ii) the 2,000,000 shares of Jaguar common stock issued by Jaguar on the Final Determination Date pursuant to the RSU Agreements. No Tranche A Shares would be issued to the contingent right holders.

Example 2. Same facts as in Example 1 except that (i) the RSU Indemnitors forfeit their right to an aggregate of 2,000,000 shares of Jaguar common stock pursuant to their indemnification obligations under Article VI of the Merger Agreement, and (ii) Nantucket sells all the Tranche A Shares and all 20,000,000 Tranche B Shares and does not reach the Hurdle.

Pursuant to Section 3.2 of the RSU Agreements, the RSU Indemnitors' aggregate Pro Rata Portion of the 20,000,000 Tranche B Shares that were delivered to Nantucket is calculated as follows: $20,000,000 \times [5,000,000 / (20,000,000 + 5,000,000)] = 4,000,000$. However, after the forfeiture under their indemnification obligation, the fixed number of shares of Jaguar common stock issuable under their Jaguar RSUs is only 3,000,000. Therefore, the RSU Indemnitors as a group will forfeit their right to 3,000,000 shares of Jaguar common stock. On the Final Determination Date, Jaguar will issue 3,000,000 shares of Jaguar common stock to the contingent right holders.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

As a result of the foregoing, the total number of Merger Shares to be distributed to the contingent right holders is 3,000,000, consisting of (i) zero Tranche B Shares and (ii) the 3,000,000 shares of Jaguar common stock issued by Jaguar on the Final Determination Date pursuant to the RSU Agreements. No Tranche A Shares would be issued to the contingent right holders.

Example 3. Same facts as Example 2 except that Nantucket meets the Hurdle by selling 8,500,000 of the Tranche A Shares. As a result of reaching the Hurdle, Nantucket delivers 4,250,000 Tranche A Shares to the Exchange Agent for issuance to the contingent right holders and the RSU holders (to be issued as Contingent Shares upon vesting of their RSUs), and the Escrow Agent delivers all 20,000,000 Tranche B Shares to the Exchange Agent for issuance to the contingent right holders, all in accordance with the Investor Rights Agreement.

The 4,250,000 Tranche A Shares are allocated between the contingent right holders and the RSU holders as follows:
 $4,250,000 \times [20,000,000 / (20,000,000 + 5,500,000)] = 3,333,333$ to the contingent right holders and
 $4,250,000 \times [5,500,000 / (20,000,000 + 5,500,000)] = 916,667$ to the RSU holders.

As a result of the foregoing, the total number of Merger Shares to be distributed to the contingent right holders is 23,333,333, consisting of (i) 20,000,000 Tranche B Shares and (ii) 3,333,333 Tranche A Shares.

SUMMARY TABLE OF HURDLE AMOUNTS

Below is a table summarizing the Hurdle Amounts for each time period during which the Tranche B Shares may be held in escrow. The Hurdle Amounts vary depending on the length of time since the closing of the price of Jaguar common stock following the merger and the amount of cash proceeds that Nantucket receives from sales of Tranche A Shares or Tranche B Shares during the prior time periods. *The Hurdle Amounts set forth in the table below are for illustration purposes and assume that Nantucket has not received any proceeds from sales of Tranche A or Tranche B Shares during the prior time period. The actual Hurdle Amounts may differ from the amounts provided below. The actual calculation of the Hurdle Amounts shall be made by Jaguar and Nantucket in accordance with the Investor Rights Agreement. In the event of a conflict between these examples and the Investor Rights Agreement, the Investor Rights Agreement shall control.*

Time Period	Hurdle Amount	
	Assuming Cash Repayment to Nantucket under the Nantucket Settlement Agreement of \$8 M	Assuming Cash Repayment to Nantucket under the Nantucket Settlement Agreement of \$8.5 M
Period 1 (From April 1, 2017 (the "Trigger Date") to 12 months after the Trigger Date)	\$ 20,250,000	\$ 20,000,000
Period 2 (From the first day that is 12 months after the Trigger Date to 18 months after the Trigger Date)	\$ 27,843,750	\$ 27,500,000
Period 3 (From the first day that is 18 months after the Trigger Date to 24 months after the Trigger Date)	\$ 35,437,500	\$ 35,000,000
Period 4 (From the first day that is 24 months after the Trigger Date to 30 months after the Trigger Date)	\$ 40,500,000	\$ 40,000,000
Period 5 (From the first day that is 30 months after the Trigger Date to 36 months after the Trigger Date)	\$ 45,562,500	\$ 45,000,000

F-1

Table of Contents

PART II: INFORMATION NOT REQUIRED IN PROSPECTUS

Item 20. Indemnification of Directors and Officers

Section 102(b)(7) of the DGCL authorizes a corporation in its certificate of incorporation to eliminate or limit personal liability of directors of the corporation for violations of the directors' fiduciary duty of care. However, directors remain liable for breaches of duties of loyalty, failing to act in good faith, engaging in intentional misconduct, knowingly violating a law, paying a dividend or approving a stock repurchase which was illegal under DGCL Section 174 or obtaining an improper personal benefit. In addition, equitable remedies for breach of fiduciary duty of care, such as injunction or recession, are available.

Jaguar's current certificate of incorporation eliminates the personal liability of the members of its board of directors to the fullest extent permitted by the DGCL. Any repeal or modification of that provision by the stockholders of the corporation will not adversely affect any right or protection of a director of the corporation existing at the time of such repeal or modification.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he was or is a party or is threatened to be made a party to any threatened, ending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Jaguar's current bylaws provide for indemnification of its officers and directors to the fullest extent permitted by the DGCL.

Jaguar has entered into indemnification agreements with each of its directors and officers, pursuant to which Jaguar has agreed, to the maximum extent permitted by applicable law and subject to the specified terms and conditions set forth in each agreement, to indemnify a director or officer who acts on Jaguar's behalf and is made or threatened to be made a party to any action or proceeding against expenses, judgments, fines and amounts paid in settlement that are incurred by such officer or director in connection with the action or proceeding. The indemnification provisions apply whether the action was instituted by a third party or by Jaguar.

Jaguar has purchased and maintains insurance on behalf of its officers and directors that provides coverage for expenses and liabilities incurred by them in their capacities as officers and directors.

Item 21. Exhibits and Financial Statement Schedules

A list of exhibits included as part of this registration statement is set forth in the Exhibit Index which immediately precedes such exhibits and is hereby incorporated by reference herein

Table of Contents

Item 22. Undertakings

(a) The undersigned registrant hereby undertakes as follows:

(1)

To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i)

To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii)

To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii)

To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

(2)

That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3)

To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4)

That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser: each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Table of Contents

(c) The undersigned registrant hereby undertakes as follows:

(1)

That prior to any public reoffering of the securities registered hereunder through use of a prospectus which is a part of this registration statement, by any person or party who is deemed to be an underwriter within the meaning of Rule 145(c), the issuer undertakes that such reoffering prospectus will contain the information called for by the applicable registration form with respect to reofferings by persons who may be deemed underwriters, in addition to the information called for by the other items of the applicable form.

(2)

That every prospectus (i) that is filed pursuant to paragraph (c)(1) immediately preceding, or (ii) that purports to meet the requirements of Section 10(a)(3) of the Securities Act and is used in connection with an offering of securities subject to Rule 415, will be filed as a part of an amendment to the registration statement and will not be used until such amendment is effective, and that, for purposes of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3)

To respond to requests for information that is incorporated by reference into this proxy statement/prospectus/information statement pursuant to Item 4, 10(b), 11, or 13 of Form S-4, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the registration statement through the date of responding to the request.

(4)

To supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the registration statement when it became effective.

(d) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Signature	Title	Date
* <hr/>	Director	April 20, 2017
Ari Azhir		
*By:		
<hr/> /s/ LISA A. CONTE		
Lisa A. Conte, <i>Attorney in Fact</i>		
	II-5	

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

EXHIBIT INDEX

Exhibit No.	Description
2.1*	Agreement and Plan of Merger, dated as of March 31, 2017, by and among Jaguar Animal Health, Inc., Napo Acquisition Corporation, Napo Pharmaceuticals, Inc. and Gregory Stock (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K of Jaguar Animal Health, Inc. filed March 31, 2017, File No. 001-36714 and included as a part of Annex A to the joint proxy statement/prospectus which forms part of this registration statement).
3.1	Second Amended and Restated Certificate of Incorporation of Jaguar Animal Health, Inc. (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K (No. 001-36714) filed on May 18, 2015).
3.2*	Form of Third Amended and Restated Certificate of Incorporation of Jaguar Health, Inc. (included as Annex B to the joint proxy statement/prospectus which forms part of this registration statement).
3.4	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to the Current Report on Form 8-K (No. 001-36714) filed on May 18, 2015).
4.1	Specimen Common Stock Certificate of Jaguar Animal Health, Inc. (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-1/A (No. 333-198383) filed on October 10, 2014).
5.1**	Opinion of Reed Smith LLP as to validity of the securities being registered.
10.1#	Form of Indemnification Agreement by and between Jaguar Animal Health, Inc. and its directors and officers (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 (No. 333-198383) filed on August 27, 2014).
10.2#	Jaguar Animal Health, Inc. Amended and Restated 2014 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on June 20, 2016).
10.3#	Form of Notice of Grant of Stock Option and Stock Option Agreement under the 2014 Stock Incentive Plan (incorporated by reference to Exhibit 10.6 to the Registration Statement on Form S-1 (No. 333-198383) filed on August 27, 2014).
10.4#	Form of Notice of Grant of Restricted Stock and Restricted Stock Agreement under the 2014 Stock Incentive Plan (incorporated by reference to Exhibit 10.7 to the Registration Statement on Form S-1 (No. 333-198383) filed on August 27, 2014).
10.5#	Form of Notice of Grant of Restricted Stock Units and Restricted Stock Unit Agreement under the 2014 Stock Incentive Plan (incorporated by reference to Exhibit 10.8 to the Registration Statement on Form S-1 (No. 333-198383) filed on August 27, 2014).
10.6#	Offer Letter by and between Jaguar Animal Health, Inc. and Lisa A. Conte, dated March 1, 2014 (incorporated by reference to Exhibit 10.9 to the Registration Statement on Form S-1 (No. 333-198383) filed on August 27, 2014).
10.7#	Offer Letter by and between Jaguar Animal Health, Inc. and Steven R. King, Ph.D., dated February 28, 2014 (incorporated by reference to Exhibit 10.11 to the Registration Statement on Form S-1 (No. 333-198383) filed on August 27, 2014).
10.8	Amended and Restated License Agreement by and between Jaguar Animal Health, Inc. and Napo Pharmaceuticals, Inc., dated August 6, 2014 (incorporated by reference to Exhibit 10.13 to the Registration Statement on Form S-1 (No. 333-198383) filed on August 27, 2014).

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Exhibit No.	Description
10.9	Employee Leasing and Overhead Allocation Agreement by and between Jaguar Animal Health, Inc. and Napo Pharmaceuticals, Inc., dated July 1, 2013 (incorporated by reference to Exhibit 10.14 to the Registration Statement on Form S-1 (No. 333-198383) filed on August 27, 2014).
10.10	Assignment of Sublease and Landlord Consent by and between Jaguar Animal Health, Inc. and Napo Pharmaceuticals, Inc., dated June 1, 2014 (incorporated by reference to Exhibit 10.15 to the Registration Statement on Form S-1 (No. 333-198383) filed on August 27, 2014).
10.11	Form of Common Stock Warrant, which expires February 5, 2019 (incorporated by reference to Exhibit 10.16 to the Registration Statement on Form S-1 (No. 333-198383) filed on August 27, 2014).
10.12	Form of Common Stock Warrant issued to Indena S.p.A., which expires June 26, 2019 (incorporated by reference to Exhibit 10.17 to the Registration Statement on Form S-1 (No. 333-198383) filed on August 27, 2014).
10.13	Form of Common Stock Warrant issued to Joshua Mailman, which expires August 26, 2016 (incorporated by reference to Exhibit 10.21 to the Registration Statement on Form S-1/A (No. 333-198383) filed on September 9, 2014).
10.14#	Offer Letter by and between Jaguar Animal Health, Inc. and John A. Kallassy, dated as of September 19, 2014 (incorporated by reference to Exhibit 10.22 to the Registration Statement on Form S-1/A (No. 333-198383) filed on October 10, 2014).
10.15	Non-Disturbance Letter Agreement by and between Napo Pharmaceuticals, Inc. and Nantucket Investments Limited, as Administrative Agent and Collateral Agent, dated October 10, 2014 (incorporated by reference to Exhibit 10.23 to the Registration Statement on Form S-1/A (No. 333-198383) filed on October 10, 2014).
10.16	Form of Warrant to Purchase Common Stock issued to GPB Life Science Holdings LLC and 31 Group, LLC, which expires October 30, 2019 (incorporated by reference to Exhibit 10.25 to the Registration Statement on Form S-1/A (No. 333-198383) filed on October 31, 2014).
10.17	Form of Exchange Warrant to Purchase Common Stock, issued to GPB Life Science Holdings LLC and 31 Group, LLC, which expires June 3, 2020, as amended (incorporated by reference to Exhibit 10.27 to the Registration Statement on Form S-1/A (No. 333-198383) filed on April 17, 2015).
10.18	Amendment No. 1 to Amended and Restated License Agreement between Jaguar Animal Health, Inc. and Napo Pharmaceuticals, Inc., dated as of January 27, 2015 (incorporated by reference to Exhibit 10.28 to the Registration Statement on Form S-1/A (No. 333-198383) filed on March 20, 2015).
10.19	Offer Letter by and between Jaguar Animal Health, Inc. and Michael Hauser, D.V.M., dated as of March 3, 2015 (incorporated by reference to Exhibit 10.32 to the Registration Statement on Form S-1/A (No. 333-198383) filed on March 20, 2015).
10.20	Form of Representative's Warrant (incorporated by reference to Exhibit 10.33 to the Registration Statement on Form S-1/A (No. 333-198383) filed on April 17, 2015).
10.21	Form of Warrant and Note Exercise Amendment pursuant to Convertible Note and Warrant Purchase Agreement dated December 23, 2014 (incorporated by reference to Exhibit 10.35 to the Registration Statement on Form S-1/A (No. 333-198383) filed on April 17, 2015).

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Exhibit No.	Description
10.22	Convertible Note and Warrant Purchase Agreement dated March 20, 2015 by and between Jaguar Animal Health, Inc., and Dechra Pharmaceuticals PLC (incorporated by reference to Exhibit 10.37 to the Registration Statement on Form S-1/A (No. 333-198383) filed on April 17, 2015).
10.23	Common Stock Warrant issued pursuant to the Convertible Note and Warrant Purchase Agreement dated March 20, 2015, which expires December 31, 2017 (incorporated by reference to Exhibit 10.39 to the Registration Statement on Form S-1/A (No. 333-198383) filed on April 17, 2015).
10.24	Form of Warrant Exercise Amendment pursuant to Exchange Warrant to Purchase Common Stock dated December 3, 2014 (incorporated by reference to Exhibit 10.40 to the Registration Statement on Form S-1/A (No. 333-198383) filed on April 17, 2015).
10.25	Form of Amended and Restated Exchange Warrant to Purchase Common Stock (incorporated by reference to Exhibit 10.41 to the Registration Statement on Form S-1/A (No. 333-198383) filed on April 17, 2015).
10.26	Sublease Agreement by and between SeeChange Health Management LLC and Jaguar Animal Health, Inc., dated June 23, 2015 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K (No. 001-36714) filed on June 23, 2015).
10.27	Consent to Sublease by and among CA-Mission Street Limited Partnership, SeeChange Health Management LLC and Jaguar Animal Health, Inc., dated June 19, 2015 (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K (No. 001-36714) filed on June 23, 2015).
10.28	Loan and Security Agreement between Jaguar Animal Health, Inc., Qualified Subsidiaries thereof, the several banks and other financial institutions or entities from time to time parties thereto as lenders and Hercules Technology Growth Capital, Inc., dated as of August 18, 2015 (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K (No. 001-36714) filed on August 20, 2015).
10.29	Manufacture and Supply Agreement between Jaguar Animal Health, Inc. and Glenmark Pharmaceuticals Ltd., dated September 22, 2015 (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q (No. 001-36714) filed with the Securities and Exchange Commission on November 13, 2015).
10.30	Formulation Development and Manufacturing Agreement between Jaguar Animal Health, Inc. and Patheon Pharmaceuticals Inc., dated October 8, 2015 (incorporated by reference to Exhibit 10.30 to the Registration Statement on Form S-1 (No. 333-208905) filed with the Securities and Exchange Commission on January 7, 2016).
10.31#	Offer Letter by and between Jaguar Animal Health, Inc., and Karen Wright, dated as of October 11, 2015 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on December 18, 2015).
10.32	Form of Convertible Promissory Note issued pursuant to the Convertible Note and Warrant Purchase Agreement dated as of December 23, 2014 (incorporated by reference to Exhibit 10.30 to the Registration Statement on Form S-1/A (No. 33-198383) filed on March 20, 2015).
10.33	First Amendment to the Loan and Security Agreement and Waiver, by and among Jaguar Animal Health, Inc., Hercules Capital, Inc. and the lender party thereto, dated April 21, 2016 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K (No. 001-36714) filed on April 27, 2016).

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Exhibit No.	Description
10.34#	Separation Agreement, by and between Jaguar Animal Health, Inc. and John Kallassy, dated April 28, 2016 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K (No. 001-36714) filed on May 3, 2016).
10.35	Common Stock Purchase Agreement, dated June 8, 2016, by and between Jaguar Animal Health, Inc. and Aspire Capital Fund, LLC (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on June 9, 2016).
10.36	Letter of Intent, between Jaguar Animal Health, Inc. and Napo Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on October 6, 2016).
10.37	Common Stock Warrant issued pursuant to the Letter Agreement, dated November 8, 2016, between Jaguar Animal Health, Inc. and Serious Change II LP, which expires July 28, 2022 (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q (No. 001-36714) filed on November 14, 2016).
10.38	Form of Securities Purchase Agreement, by and among Jaguar Animal Health, Inc. and the investors in the 2016 Private Placement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on November 29, 2016).
10.39	Form of Registration Rights Agreement, by and among Jaguar Animal Health, Inc. and the investors in the 2016 Private Placement (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed on November 29, 2016).
10.40	Supply and Distribution Agreement, dated as of September 6, 2016, by and between Jaguar Animal Health, Inc. and Integrated Animal Nutrition and Health Inc. (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q/A (No. 001-36714) filed on December 5, 2016).
10.41	Distribution Agreement, dated December 9, 2016, by and between Jaguar Animal Health, Inc. and Henry Schein, Inc. (incorporated by reference to Exhibit 10.41 to the Annual Report on Form 10-K (No. 001-36714) filed on February 15, 2017).
10.42	License, Development, Co-Promotion and Commercialization Agreement, dated January 27, 2017, by and between Jaguar Animal Health, Inc. and Elanco US, Inc. (incorporated by reference to Exhibit 10.42 to the Annual Report on Form 10-K (No. 001-36714) filed on February 15, 2017).
10.43	Common Stock Warrant issued pursuant to the Letter Agreement, dated January 30, 2017, between Jaguar Animal Health, Inc. and Serious Change II LP, which expires January 31, 2019 (incorporated by reference to Exhibit 10.43 to the Annual Report on Form 10-K (No. 001-36714) filed on February 15, 2017).
10.44	Binding Agreement of Terms for Jaguar Animal Health, Inc. Acquisition of Napo Pharmaceuticals, dated February 8, 2017, between Jaguar Animal Health, Inc. and Napo Pharmaceuticals, Inc. (incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on February 9, 2017).
10.45*	Note Purchase Agreement, dated March 1, 2017, by and among Napo Pharmaceuticals, Inc. and the purchasers named therein.
10.46*	Form of Original Issue Discount Exchange Promissory Note issued pursuant to the Note Purchase Agreement dated as of March 1, 2017, by and among Napo Pharmaceuticals, Inc. and the Purchasers as defined therein.
10.47*	Amended and Restated Note Purchase Agreement, dated March 31, 2017, by and among Napo Pharmaceuticals, Inc., Kingdon Associates, M. Kingdon Offshore Master Fund L.P., and Kingdon Family Partnership, L.P.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Exhibit No.	Description
10.48*	Form of Kingdon Convertible Promissory Note issued pursuant to the Amended and Restated Note Purchase Agreement, dated March 31, 2017, by and among Napo Pharmaceuticals, Inc., Kingdon Associates, M. Kingdon Offshore Master Fund L.P., and Kingdon Family Partnership, L.P.
10.49*	Limited Subordination Agreement, dated December 30, 2016, by and among Napo Pharmaceuticals, Inc., Kingdon Capital Management, L.L.C., Nantucket Investments Limited, the lenders under the Nantucket Financing Agreement party thereto, Dorsar Investment Company, Alco Investment Company and Two Daughters LLC.
10.50*	Security Agreement, dated December 30, 2016, by and among Napo Pharmaceuticals, Inc., Kingdon Capital Management, L.L.C., and the purchasers named therein.
10.51*	Commitment Letter, dated February 21, 2017, signed by Invesco Asset Management Limited.
10.52*	Settlement and Discounted Payoff Agreement, dated March 31, 2017, by and among the lenders named therein, Nantucket Investments Limited, and Napo Pharmaceuticals, Inc.
10.53*	Debt and Warrant Settlement Agreement, dated March 31, 2017, by and among Dorsar Investment Company, Alco Investment Company, Two Daughters LLC, and Napo Pharmaceuticals, Inc.
10.54*	Debt Settlement Agreement, dated March 31, 2017, by and between Boies Schiller Flexner LLP and Napo Pharmaceuticals, Inc.
10.55*	Debt Settlement Agreement, dated March 31, 2017, by and between Dan Becka and Napo Pharmaceuticals, Inc.
10.56	Investor Rights Agreement, dated March 31, 2017, by and among Jaguar Animal Health, Inc. and Nantucket Investments Limited (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of Jaguar Animal Health, Inc. filed March 31, 2017, File No. 001-36714).
10.57*	Form of Escrow Agreement, by and among Jaguar Animal Health, Inc., Nantucket Investments Limited and Citibank, National Association.
10.58*#	Form of Restricted Stock Unit Indemnification and Forfeiture Agreement, by and among Jaguar Animal Health, Inc., Napo Pharmaceuticals, Inc. and the holders of Napo RSUs.
10.59**	Collaboration Agreement, dated July 2, 2005, by and between Glenmark Pharmaceuticals Ltd. and Napo Pharmaceuticals, Inc., as amended.
10.60**	Settlement Agreement, dated December 29, 2013, by and between Glenmark Pharmaceuticals Ltd. and Napo Pharmaceuticals, Inc.
10.61**	Alliance Agreement, dated May 23, 2005, by and among AsiaPharm Investment Limited and its Affiliates, including Shandong Luye Pharmaceuticals Co. Ltd., and Napo Pharmaceuticals, Inc.
10.62**	Finder's Agreement, dated April 9, 2010, by and among Luye Pharma Group Limited and its Affiliates, including Shandong Luye Pharmaceuticals Co. Ltd., and Napo Pharmaceuticals, Inc.
10.63**	Settlement, Termination, Asset Transfer and Transition Agreement, dated March 4, 2016, by and between Napo Pharmaceuticals, Inc. and Salix Pharmaceuticals, Inc.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Exhibit No.	Description
10.64**	First Amendment to Settlement, Termination, Asset Transfer and Transition Agreement, dated as of May 10, 2016, by and between Napo Pharmaceuticals, Inc. and Salix Pharmaceuticals, Inc.
10.65**	Note Exchange and Warrant Renewal, Extension and Purchase Agreement, dated as of April 30, 2014, by and between Napo Pharmaceuticals, Inc. and the investors named therein.
10.66**	Form of Warrant to Purchase Common Stock issued to Two Daughters LLC, which expires December 31, 2025.
10.67**	Form of Warrant to Purchase Common Stock issued to Alco Investment Company, which expires December 31, 2025.
10.68**	Form of Warrant to Purchase Common Stock issued to Dorsar Investment Company, which expires December 31, 2025.
10.69**	Investment Rights Agreement, dated April 20, 2006, as amended January 25, 2011, by and among IL&FS Trust Company Limited, as trustee of the IL&FS Private Equity Trust, investing through its venture capital scheme Leverage India Fund, acting through its investment manager IL&FS Investment Managers Limited, and Napo Pharmaceuticals, Inc., and Napo India Private Limited and the Management Team, as defined therein.
10.70**	Investment Rights Agreement, dated October 1, 2007, by and among IL&FS Trust Company Limited, as trustee of the IL&FS Private Equity Trust, investing through its venture capital scheme Leverage India Fund, acting through its investment manager IL&FS Investment Managers Limited, and Sindu Private Limited, and Napo Pharmaceuticals, Inc., and Indus Pharmaceuticals Inc.
10.71**	Investment Rights Agreement, dated December 21, 2009, by and among IL&FS Trust Company Limited, as trustee of the IL&FS Private Equity Trust, investing through its venture capital scheme Leverage India Fund, acting through its investment manager IL&FS Investment Managers Limited, and Napo Pharmaceuticals, Inc., and Napo Pharmaceuticals India Private Limited.
10.72**	Marketing and Distribution Agreement, dated as of April 14, 2016, by and among Napo Pharmaceuticals, Inc. and BexR Logistics, LLC, as amended.
10.73**	Strategic Marketing Alliance Agreement, dated as of April 14, 2016, by and between Napo Pharmaceuticals, Inc. and SmartPharma, LLC.
10.74**	Quality Agreement, dated May 21, 2013, between Salix Pharmaceuticals, Inc. and Patheon Pharmaceuticals Inc., as assigned by Salix Pharmaceuticals Inc. to Napo Pharmaceuticals, Inc. pursuant to the Settlement, Termination, Asset Transfer and Transition Agreement, dated March 4, 2016, by and between Napo Pharmaceuticals, Inc. and Salix Pharmaceuticals, Inc.
10.75**	Master Manufacturing Services Agreement, dated May 21, 2013, between Salix Pharmaceuticals, Inc. and Patheon Pharmaceuticals Inc., as assigned by Salix Pharmaceuticals Inc. to Napo Pharmaceuticals, Inc. pursuant to the Settlement, Termination, Asset Transfer and Transition Agreement, dated March 4, 2016, by and between Napo Pharmaceuticals, Inc. and Salix Pharmaceuticals, Inc.
10.76**	License Agreement, dated February 28, 2007, by and between Insmid Incorporated and Napo Pharmaceuticals, Inc.
10.77**	Employee Leasing and Overhead Allocation Agreement, dated July 1, 2016, by and between Napo Pharmaceuticals, Inc. and Jaguar Animal Health, Inc.

Edgar Filing: Jaguar Animal Health, Inc. - Form S-4/A

Table of Contents

Exhibit No.	Description
10.78**	Amendment No. 1 to Employee Leasing and Overhead Allocation Agreement, dated March 2, 2017, by and between Jaguar Animal Health, Inc. and Napo Pharmaceuticals, Inc.
21.1*	Subsidiaries of Jaguar Animal Health, Inc.
23.1***	Consent of BDO USA, LLP, independent registered public accounting firm for Jaguar Animal Health, Inc.
23.2***	Consent of Macias Gini & O'Connell LLP, independent auditor for Napo Pharmaceuticals, Inc.
23.4**	Consent of Reed Smith LLP (included in Exhibit 5.1 hereto).
24.1*	Power of Attorney.
99.1**	Form of Proxy Card of Jaguar Animal Health, Inc.
99.2**	Form of Proxy Card of Napo Pharmaceuticals, Inc.
99.3*	Opinion of Stifel, Nicolaus & Company, Incorporated (included as Annex C to the joint proxy statement/prospectus which forms part of this registration statement).
99.4*	Consent of Stifel, Nicolaus & Company, Incorporated
101.INS	XBRL Instance Document*
101.SCH	XBRL Taxonomy Extension Schema*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase*
101.DEF	XBRL Taxonomy Extension Definition Linkbase*
101.LAB	XBRL Taxonomy Extension Label Linkbase*
101.PRE	XBRL Taxonomy Extension Presentation Linkbase*

* Previously filed.

** To be filed by amendment.

*** Filed herewith.

Confidential treatment granted as to portions of the exhibit. Confidential materials omitted and filed separately with the Securities and Exchange Commission.

Management contract or compensatory plan or arrangement.