ONCOSEC MEDICAL Inc
Form POS AM
December 09, 2013
Table of Contents

As filed with the Securities and Exchange Commission on December 9, 2013

No. 333-175779

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 3

TO

FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ONCOSEC MEDICAL INCORPORATED

(Exact name of registrant as specified in its charter)

Nevada	**3841**	**98-0573252**

(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

9810 Summers Ridge Road, Suite 110

San Diego, CA 92121

(855) 662-6732

(Address, including zip code, and telephone number, including

area code, of registrant s principal executive offices)

Punit Dhillon

President and Chief Executive Officer

9810 Summers Ridge Road, Suite 110

San Diego, CA 92121

(855) 662-6732

(Name, address, including zip code, and telephone number, including

area code, of agent for service)

With Copies to:

Steven G. Rowles, Esq.

Matthew Steiner, Esq.

Morrison & Foerster LLP

12531 High Bluff Drive, Suite 100

San Diego, California 92130

(858) 720-5100

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box. x

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

If this Form is a post-effective amendment filed pursuant to Rule 462(c) 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. o

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. o

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

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

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 Commission, acting pursuant to said Section 8(a), may determine.

Table of Contents

EXPLANATORY NOTE

On October 24, 2011, the Securities and Exchange Commission (the SEC) declared effective the registration statement on Form S-1 (File No. 333-175779) (the Initial Registration Statement) filed by OncoSec Medical Incorporated (the Company), and on November 9, 2012, the SEC declared effective post-effective amendment no. 1 to the Initial Registration Statement. The Company is filing this post-effective amendment no. 3 to the Initial Registration Statement for the purposes of updating its financial and other disclosures to, among other things, include its audited financial statements for the fiscal year ended July 31, 2013.

Table of Contents

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This 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 or sale is not permitted.

SUBJECT TO COMPLETION, DATED DECEMBER 9, 2013

ONCOSEC MEDICAL INCORPORATED

PROSPECTUS

Up to 8,440,000 Shares of Common Stock

This prospectus relates to the offering by the selling stockholders of OncoSec Medical Incorporated of up to 8,440,000 shares of common stock, par value $0.0001 per share. These shares include 4,000,000 issued and outstanding shares of common stock, 4,000,000 shares of common stock underlying Series A warrants, all issued to certain of the selling stockholders in connection with a private placement offering completed in June 2011 (the June 2011 Private Placement). In addition, we are registering 240,000 shares of common stock underlying warrants issued to the co-placement agents in the June 2011 Private Placement, and 200,000 shares of common stock issued to a consulting firm in connection with its performance of consulting services unrelated to the June 2011 Private Placement. The common stock sold in the June 2011 Private Placement was sold at a purchase price of $0.75 per share and the related Series A Warrants authorize the holders thereof to purchase shares of common stock at an exercise price of $1.20 per share as further described in this prospectus.

The selling stockholders have advised us that they will sell the shares of common stock from time to time in the open market, on the OTCQB Marketplace, in privately negotiated transactions or a combination of these methods, at market prices prevailing at the time of sale, at prices related to the prevailing market prices or at negotiated prices.

We will not receive any proceeds from the sale of common stock by the selling stockholders.

Our common stock is traded on the OTC Markets Group Inc. s OTCQB tier under the symbol ONCS . On December 5, 2013, the closing price of our common stock was $0.30 per share.

Investing in our common stock involves a high degree of risk. Before making any investment in our common stock, you should read and carefully consider the risks described in this prospectus under Risk Factors beginning on page 5 of this prospectus.

You should rely only on the information contained in this prospectus or any prospectus supplement or amendment thereto. We have not authorized anyone to provide you with different information.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This prospectus is dated , 2013

Table of Contents

TABLE OF CONTENTS

	Page
SUMMARY	1
RISK FACTORS	5
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	18
SELLING STOCKHOLDERS	19
DETERMINATION OF OFFERING PRICE	22
PLAN OF DISTRIBUTION	22
USE OF PROCEEDS	24
DESCRIPTION OF SECURITIES	24
MARKET PRICE OF AND DIVIDENDS ON COMMON STOCK AND RELATED MATTERS	31
MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	32
BUSINESS	38
DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	48
EXECUTIVE COMPENSATION	52
CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE	55
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	56
LEGAL MATTERS	56
EXPERTS	56
WHERE YOU CAN FIND MORE INFORMATION	56
FINANCIAL STATEMENTS	F-1

OncoSec Medical Incorporated has filed applications to register the following trademarks: ImmunoPulse and NeoPulse. Other registered trademarks used in this registration statement are the property of their respective owners.

Table of Contents

SUMMARY

This summary does not contain all of the information that should be considered before investing in our common stock and warrants. Investors should read the entire prospectus carefully, including the more detailed information regarding our business, the risks of purchasing our common stock and warrants discussed in this prospectus under Risk Factors beginning on page 5 of this prospectus and our financial statements and the accompanying notes beginning on page F-1 of this prospectus.

As used in this prospectus, unless the context requires otherwise, the Company , we , us , and our refer to OncoSec Medical Incorporated, a Nevada corporation, and its consolidated subsidiary.

Our Company

We are an emerging drug-medical device and therapeutic company focused on designing, developing and commercializing innovative and proprietary medical approaches for the treatment of solid tumors where currently approved therapies are inadequate based on their efficacy or side-effects. Our Company was incorporated under the laws of Nevada on February 8, 2008 under the name Netventory Solutions Inc. Initially, we provided online inventory services to small and medium sized companies. On March 1, 2011, we changed our name to OncoSec Medical Incorporated. In March 2011, we acquired from Inovio Pharmaceuticals, Inc. (Inovio) certain assets related to the use of drug-medical device combination products for the treatment of various cancers. With this acquisition, we have abandoned our efforts in the online inventory services industry and are focusing our efforts in the biomedical industry.

Our assets include intellectual property relating to certain delivery technologies, which we refer to as the OncoSec Medical System (OMS), a therapeutic approach which is based on the use of an electroporation delivery device in combination with an approved chemotherapeutic drug and a DNA-based cytokine to treat solid tumors. These two different approaches represent unique therapeutic modalities, which we refer to as ImmunoPulse and NeoPulse. Our ImmunoPulse approach is based on the use of electroporation to enhance the local delivery of DNA plasmids which, upon uptake into cells, direct the production of immunostimulatory cytokines to generate a local, regional and systemic immune response for the treatment of various cutaneous cancers. Our NeoPulse approach utilizes our electroporation technologies for the local delivery of the chemotherapeutic drug bleomycin to treat solid tumors. OMS consists of an electrical pulse generator console and various disposable applicators specific to the individual tumor size, type and location and is designed to increase the permeability of cancer cell membranes and, as a result, increases the intracellular delivery of selected therapeutic agents. Using either ImmunoPulse, a DNA-based immunotherapy or NeoPulse, a therapy to treat solid tumors, our mission is to enable people with cancer to live longer with a better quality of life than otherwise possible or available with existing therapies.

Cancer is a disease of uncontrolled cell growth. The primary front line treatment of solid tumors involves surgical resection and/or radiation to eliminate or debulk tumor growth prior to initiating systemic therapy with chemotherapeutic agents. In the case of invasive surgical procedures, surgeons will often remove or resect an area outside of the obvious tumor mass to ensure that they have excised all of the cancerous tissue because of the difficulty in determining the border, or margin, between healthy and diseased tissue. This treatment can result in the loss of function and appearance of the surrounding tissues, significantly reducing the patient s quality of life. Although there have been recent advances in non-surgical forms of tumor ablation, such as cryoablation, stereotactic, microwave and high frequency radio ablation therapy, we believe they fail to fully satisfy the clinical need to preserve normal healthy tissue. Given the desire for improved outcomes in the surgical resection of solid tumors, we believe that there may be significant demand for our NeoPulse technology from patients, dermatologists and surgical oncologists.

Our NeoPulse approach has been developed up to Phase III clinical trials in the United States for the treatment of recurrent head and neck cancer and Phase I/II for the treatment of recurrent breast cancer. NeoPulse has potential application in a wide range of solid tumors, including basal cell carcinoma, squamous cell carcinoma, melanoma, breast, prostate, and pancreatic cancers. In addition, Phase IV pre-marketing studies to support the commercialization of NeoPulse in Europe have also been performed for the treatment of primary and recurrent head and neck cancers and cutaneous skin cancers. We are actively pursuing opportunities primarily focused in Europe, Asia and North America to partner NeoPulse for further clinical development and commercialization.

Table of Contents

When detected early and still confined to a single location, cancer may be cured by surgery or radiation and potentially, by promising new technologies such as NeoPulse. However, neither surgery nor radiation can cure cancer that has spread throughout the body. Although chemotherapy can sometimes effectively treat cancer that has spread throughout the body, a number of non-cancerous cells, such as bone marrow cells, are also highly susceptible to chemotherapy. As a result, chemotherapy often has fairly significant side effects. In addition, it is common to see cancer return after apparently successful treatment by each of these means.

Immunotherapy, a process which uses the patient s own immune system to treat cancer, may have advantages over surgery, radiation, and chemotherapy. Many cancers appear to have developed the ability to hide from the immune system. A treatment that can augment the immune response against tumor cells by making the cancer more visible to the immune system would likely represent a significant improvement in cancer therapy. Immune-enhancing proteins such as interleukin-2, or IL-2, and interferon-alpha, or IFN- , have shown encouraging results. However, these agents often require frequent doses that may result in severe side effects.

Two drugs for metastatic melanoma were approved in 2011, both on the basis of increased survival. Yervoy ®, a monoclonal antibody marketed by Bristol-Myers Squibb Co., increases the effectiveness of T-cells that can seek out and destroy melanoma cells. Zelboraf ®, a B-Raf inhibitor marketed by Roche and Daiichi Sankyo, interrupts a key process in melanoma growth in patients with a particular melanoma mutation. Both drugs are associated with significant side effects, and neither is considered a cure for melanoma.

In May 2013, two new drugs for metastatic melanoma were approved. Tafinlar® and Mekinist are single-agent oral treatments for the treatment of unresectable metastatic melanoma. Like Zelboraf®, both of these new agents interrupt a key process in melanoma growth by inhibiting the MAP Kinase signaling pathway. Also, like Zelboraf, these agents can cause significant side effects and long-term use may lead to drug resistance by tumor cells.

Our current ImmunoPulse clinical-stage approach consists of directly injecting solid tumors with a DNA plasmid which, upon uptake into cells, direct the production of the encoded immunostimulatory cytokine to generate a loco-regional immune response against the tumor, which potentially may result in a systemic immune response. The ease of manufacture, convenience, and ability to repeat administration may offer advantages over current modalities of therapy. In addition, cancer therapies using non-viral DNA delivery may offer an added margin of safety compared with viral-based delivery, as no viral particles or other potentially infectious agents are contained in the formulation. A Phase I clinical trial using our ImmunoPulse approach has been completed and three Phase II clinical trials focused on melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma have been initiated.

Our business model is based on a commercialization strategy that leverages previous in-depth clinical experiences, previous approvals for the electroporation-based devices and late stage clinical studies in the United States and Europe. We may seek regulatory approvals to initiate specific studies in target markets to collect clinical, reimbursement, and pharmacoeconomic data in order to advance our commercialization strategy. Our clinical development strategy includes completing the necessary additional clinical trials in accordance with United States Food and Drug Administration (the FDA) guidelines for cutaneous cancers including select rare cancers that have limited, adverse or no therapeutic alternatives. Our strategy also includes expanding the applications of our technologies through strategic collaborations or evaluation of other opportunities such as in-licensing and strategic acquisitions. We may collaborate with major pharmaceutical and biotechnology companies and government agencies, providing us access to complementary technologies or greater resources. These business activities are intended to provide us with mutually beneficial opportunities to expand or advance our product pipeline and serve significant unmet medical needs. We may license our intellectual property to other companies to leverage our technologies for applications that may not be appropriate for our independent product development.

The June 2011 Private Placement

On June 21, 2011, we entered into a Securities Purchase Agreement (the Securities Purchase Agreement), with certain institutional investors providing for the issuance and sale of an aggregate of 4,000,000 shares of our common stock, Series A Warrants to purchase an aggregate of 4,000,000 shares of our common stock, Series B Warrants to purchase an aggregate of 4,000,000 shares of our common stock and Series C Warrants to purchase an aggregate of 4,000,000 shares of our common stock, for proceeds to us of $3.0 million (the June 2011 Private Placement). The June 2011 Private Placement closed on June 24, 2011.

Table of Contents

Pursuant to the terms of the Securities Purchase Agreement, each purchaser was issued a Series A Warrant, a Series B Warrant and a Series C Warrant, each to purchase up to a number of shares of our common stock equal to 100% of the shares issued to such purchaser pursuant to the Securities Purchase Agreement. The Series A Warrants have an exercise price of $1.20 per share, are exercisable immediately upon issuance and have a term of exercise of five years. On March 28, 2012, the exercise price of the Series A Warrants reset to $0.50 upon our issuance of common stock at a lower effective price than the warrant s then exercise price, pursuant to certain price-based anti-dilution provisions in the Series A Warrants. The Series B Warrants had an exercise price of $0.75 per share, were exercisable immediately upon issuance and had a term of exercise equal to the earlier of (a) the later of (i) eight months following the closing of the June 2011 Private Placement and (ii) four months following the earliest date that the shares underlying such warrants have been sold or may be freely sold, whether pursuant to a registration statement, Rule 144 or an exemption from registration under Section 4(a)(1) of the Securities Act of 1933, as amended (the Securities Act), and (b) sixteen months from the closing of the June 2011 Private Placement (unless extended three additional months upon the occurrence of a single issuance by us of our common stock or warrants to purchase our common stock that meets certain criteria specified in the warrants). The Series C Warrants had an exercise price of $1.20 per share, vested and were exercisable ratably in proportion to each holder s exercise of the Series B Warrants and had a term of exercise equal to five years. On February 21, 2012, all of the Series B and Series C Warrants expired unexercised. On the date of our entry into the Securities Purchase Agreement, the exercise price of the Series B Warrants was lower than the market value of our common stock, which closed at $1.12 on the OTC Bulletin Board on that date, for an aggregate discount to our market price of $1,480,000 as of June 21, 2011. The total value of the common stock underlying the Series B Warrants as of June 21, 2011 was $4,480,000.

On June 24, 2011, we entered into a Registration Rights Agreement (the Registration Rights Agreement) with the purchasers in the June 2011 Private Placement. Under the Registration Rights Agreement, we were required to file a registration statement within 30 days following the closing of the June 2011 Private Placement to register the resale of the shares of common stock issued in the June 2011 Private Placement and the shares of common stock underlying the Series A, Series B and Series C Warrants. Our failure to meet the filing deadlines and other requirements set forth in the Registration Rights Agreement may subject us to the payment of substantial financial penalties. The shares of common stock to be registered on the registration statement of which this prospectus forms a part include all of the shares issued and the shares underlying the warrants issued in the June 2011 Private Placement.

Rodman & Renshaw, LLC (Rodman) acted as the lead placement agent for the June 2011 Private Placement. Pursuant to the terms of a Placement Agent Agreement entered into with Rodman on June 1, 2011 and amended on June 21, 2011 (the Placement Agent Agreement), we agreed to pay to Rodman and a co-placement agent fees equal to 6% of the aggregate gross proceeds raised in the June 2011 Private Placement, to issue to Rodman and the co-placement agent warrants to purchase an aggregate of 240,000 shares of our common stock, and to reimburse Rodman for certain expenses. The shares of common stock underlying the warrants originally issued to Rodman and the co-placement agent are included in the registration statement of which this prospectus forms a part.

After deducting for fees and expenses, the aggregate cash net proceeds to us from the June 2011 Private Placement were approximately $2.79 million. The table below describes in more detail the costs to us associated with the June 2011 Private Placement:

Gross proceeds received by us in the June 2011 Private Placement:	$	3,000,000(1)
Total cash payments to the placement agents in connection with the June 2011 Private Placement:	$	210,000(2)
Total non-cash payments to the placement agents in connection with the June 2011 Private Placement	$	130,708(3)
Resulting net cash proceeds to the Company in connection with the June 2011 Private Placement:	$	2,790,000(4)

Resulting net proceeds to the Company in connection with the June 2011 Private Placement, including cash and non-cash payments:	$	2,659,292(5)
Total possible profit to be realized by the Series B warrant holders as a result of any exercise discounts underlying the Series B Warrants:	$	1,480,000(6)

(1) Does not include the potential gross proceeds payable to us upon exercise of all of the warrants issued in connection with the June 2011 Private Placement that remain outstanding as of the date of this prospectus, which would equal $2,120,000.

Table of Contents

(2) This amount does not include additional payments that we may be required to make under certain circumstances but that are currently indeterminable, including (a) potential liquidated damages for failure to register the shares issued or issuable upon exercise of warrants to the investors in the June 2011 Private Placement (such liquidated damages not to exceed 9% of the aggregate subscription amount paid by each investor in the June 2011 Private Placement), (b) amounts payable if we fail to timely deliver certificates representing the required number of shares upon exercise of the warrants issued to investors in the June 2011 Private Placement, and (c) amounts payable if we or our transfer agent fail to timely remove certain restrictive legends from certificates representing shares issued or issuable in the June 2011 Private Placement.

(3) Includes the value of the warrants issued to the placement agents.

(4) Resulting cash net proceeds is calculated by subtracting the total possible and currently determinable cash payments from gross proceeds.

(5) Resulting cash and non-cash net proceeds is calculated by subtracting the total possible and currently determinable cash and non-cash payments from gross proceeds.

(6) On the date of our entry into the Securities Purchase Agreement, the Series B Warrants had an exercise price lower than the market value of our common stock, which closed at $1.12 on the OTC Bulletin Board on that date, for an aggregate discount to our market price of $1,480,000 on that date. The total value of the common stock underlying the Series B Warrants as of June 21, 2011 was $4,480,000. The table below indicates the total possible discount to the market price as of June 21, 2011, for the securities underlying the Series B Warrants.

Market price per share of the Common Stock on the date of the sale of the Series B Warrants:	$	1.12
Exercise price per share of the Series B Warrants:	$	0.75
Total possible shares of Common Stock underlying the Series B Warrants:		4,000,000 shares
Combined market price of total number of shares of Common Stock underlying the Series B Warrants on June 21, 2011:	$	4,480,000
Combined exercise price of total number of shares of Common Stock underlying the Warrants:	$	3,000,000
Total Possible Discount to the Market Price as of June 21, 2011	$	1,480,000

The last trading price of our common stock on the OTC Bulletin Board on June 24, 2011, the date of the closing of the June 2011 Private Placement, was $0.77. Calculated as of June 24, 2011, the total possible discount to the market price of our common stock for the Series B Warrants would have been $80,000.

The total value of payments made to the placement agents (including the value of the warrants issued to the placement agents) and the total possible discount to the market price of the shares underlying the Series B Warrants as of the date of the Securities Purchase Agreement, divided

by the proceeds to us from the exercise of the Series B Warrants of $3,000,000, is 60.7%. However, we do not expect to make any additional payments to the selling stockholders, the placement agents or any of their affiliates in connection with the Series B Warrants, all of which expired unexercised on February 21, 2012. Excluding such payments made by us in connection with the June 2011 Private Placement, the applicable percentage is 49.3%.

The shares of common stock to be registered on the registration statement of which this prospectus forms a part also include 200,000 shares of common stock that were issued to a consulting firm in connection with its performance of consulting services for us that are unrelated to the June 2011 Private Placement.

The issuances of securities in the June 2011 Private Placement described above were issued under an exemption from the registration requirements of the Securities Act, pursuant to Section 4(a)(2) thereof and Rule 506 of Regulation D promulgated thereunder.

Table of Contents

Corporate Information

We were incorporated under the laws of the State of Nevada on February 8, 2008 under the name Netventory Solutions Inc. to pursue the business of inventory management solutions. Effective March 1, 2011, we completed a merger with our subsidiary, OncoSec Medical Incorporated, a Nevada corporation which was incorporated solely to effect a change in our name. As a result, we have changed our name from Netventory Solutions Inc. to OncoSec Medical Incorporated. Our principal executive offices are located at 9810 Summers Ridge Road, Suite 110, San Diego, CA 92121. The telephone number at our principal executive office is (855) 662-6732. Our website address is www.oncosec.com. Information contained on our website is not deemed part of this prospectus.

The Offering

This prospectus relates to the resale from time to time by the selling stockholders identified in this prospectus of up to 8,440,000 shares of our common stock. The majority of the common stock, together with related warrants to purchase our common stock, was purchased by certain of the selling stockholders in the June 2011 Private Placement. No shares are being offered for sale by us.

Common stock outstanding prior to offering	171,038,526(1)
Common stock offered by the selling stockholders	8,440,000(2)
Common stock to be outstanding after the offering	175,278,526(3)
Use of Proceeds	We will not receive any proceeds from the sale of common stock offered by the selling stockholders under this prospectus.
OTCQB Marketplace Symbol	ONCS

(1) As of December 5, 2013. Includes 4,000,000 shares of our common stock issued to certain selling stockholders in connection with the June 2011 Private Placement and 200,000 shares of our common stock issued to Vista Partners LLC (Vista) in connection with its performance of consulting services unrelated to the June 2011 Private Placement. Includes 14,754,480 shares of common stock held by our affiliates as of the date of this prospectus. Other than Vista, none of the selling stockholders held shares of our common stock immediately prior to the closing of the June 2011 Private Placement. The total shares of common stock held by persons other than the selling stockholders, affiliates of the Company and affiliates of the selling stockholders as of immediately prior to the closing of the June 2011 Private Placement on June 23, 2011was 69,204,520, and the total shares of common stock held by persons other than the selling stockholders, affiliates of the Company and affiliates of the selling stockholders as of the date of this prospectus is 150,704,846.

(2) Includes (a) 4,000,000 shares of our common stock issued to certain selling stockholders in connection with the June 2011 Private Placement (all of which have been resold by such selling stockholders as of December 5, 2013), (b) 200,000 shares of common stock shares of our common stock issued to and offered by Vista, (c) 4,000,000 shares of our common stock offered by the selling stockholders issuable upon exercise of each of the Series A Warrants, and (d) 240,0000 shares of common stock issuable to the placement agents for the June 2011 Private Placement upon exercise of their warrants.

(3) As of December 5, 2013. Assumes the full exercise of the warrants held by the selling stockholders to acquire 4,240,000 shares of common stock. Excludes (a) 9,000,000 shares of common stock reserved for future issuance under our 2011 Stock Incentive Plan (the 2011 Plan), (b) 75,157,870 shares of common stock issuable upon the exercise of outstanding warrants that are not being registered pursuant to the registration statement of which this prospectus forms a part and (c) 4,000,000 shares of our common stock that were issued to certain selling stockholders in connection with the June 2011 Private Placement and that have been resold by such selling stockholders as of December 5, 2013. As of December 5, 2013, there were (i) options to purchase 4,978,956 shares of our common stock outstanding under the 2011 Plan, with a weighted average exercise price of $0.23 per share and (ii) 79,397,574 shares of common stock issuable upon the exercise of outstanding warrants with exercise prices ranging from $0.26 to $1.20 per share.

RISK FACTORS

Investment in our common stock and warrants involves a high degree of risk. The following risk factors summarize some of the material risks inherent in and affecting this offering and our business, and you should carefully consider them, addition to the other information contained in this prospectus. This prospectus contains forward-looking statements. Our business, financial condition, results of operations and stock price could be materially adversely affected by any of these risks. Additional risks not presently known to us or that we currently deem immaterial may also impair our business financial condition, results of operations and stock price.

Table of Contents

Risks Related to this Offering

We must raise additional capital in order to continue operating our business, and such additional funds may not be available on acceptable terms or at all.

We do not generate, and may never generate, any cash from operations and must raise additional funds in order to continue operating our business. We estimate our cash requirements over the annual fiscal period ending July 31, 2014 to be approximately $9.1 million, which is inclusive of our $1 million payment to be made in December 2013 to Inovio under the terms of the asset purchase agreement pursuant to which we acquired certain assets from Inovio in March 2011 (the Asset Purchase Agreement). As of July 31, 2013, we had cash and cash equivalents of approximately $4.9 million. In addition to the June 2011 Private Placement, we have raised funds through our issuance of common stock and warrants to acquire our common stock on three separate public offerings closed one March 28, 2012, December 17, 2012, and September 18, 2013, which resulted in net proceeds to us of approximately $7.2 million, $6.7 million and $11.1 million, respectively, and issued a collective aggregate of 107,592,000 shares of our common stock and warrants to purchase a collective aggregate of 69,296,000 shares of our common stock to the investors in those offerings, at a per share price of $0.25 in each case.

We have a history of raising funds through offerings of our common stock, and we may in the future raise additional funds through public or private equity offerings, debt financings or corporate collaborations and licensing arrangements. We expect to continue to fund our operations primarily through equity and debt financings in the future. If additional capital is not available, we may not be able to continue to operate our business pursuant to our business plan or we may have to discontinue our operations entirely. We will require additional financing to fund our planned operations, including developing and commercializing our intellectual property, seeking to license or acquire new assets, researching and developing any potential patents, related compounds and other intellectual property, funding potential acquisitions, and supporting clinical trials and seeking regulatory approval relating to our assets and any assets we may acquire in the future. Additional financing may not be available to us when needed or, if available, may not be available on commercially reasonable terms. If we issue equity or convertible debt securities to raise additional funds, our existing stockholders may experience substantial dilution, and the new equity or debt securities may have rights, preferences and privileges senior to those of our existing stockholders. If we incur additional debt, it may increase our leverage relative to our earnings or to our equity capitalization, requiring us to pay additional interest expenses. Obtaining commercial loans, assuming those loans would be available, would increase our liabilities and future cash commitments.

We may not be able to obtain additional financing if the volatile conditions in the capital and financial markets, and more particularly the market for early development stage biomedical company stocks, persist. Weak economic and capital markets conditions could result in increased difficulties in raising capital for our operations. We may not be able to raise money through the sale of our equity securities or through borrowing funds on terms we find acceptable. If we cannot raise the funds that we need, we will be unable to continue our operations, and our stockholders could lose their entire investment in our company.

We will have immediate and broad discretion over the use of the net proceeds from this offering and we may use these proceeds in ways with which you may not agree.

We have considerable discretion in the application of the proceeds of this offering. We currently expect to use the net proceeds from this offering to pay for our clinical development and for working capital and general corporate purposes. We may also use a portion of these proceeds for the potential acquisition of, or investment in, product candidates, technologies, formulations or companies that complement our business, although we have no current understandings, commitments, or agreements to do so. You must rely on our judgment regarding the application of the net proceeds of this offering. Our judgment may not result in positive returns on your investment and you will not have an

opportunity to evaluate the economic, financial, or other information upon which we base our decisions.

There is no public market for the warrants being offered in this offering.

There is no established public trading market for the warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply for listing the warrants on any securities exchange or expect the warrants to trade on the OTCQB Marketplace. Without an active market, the liquidity of the warrants will be limited.

Table of Contents

Holders of our common stock may experience dilution in the future.

Since inception we have funded our operations primarily through equity financings, including the June 2011 Private Placement, our March 2012 issuance of 31,000,000 shares of common stock and warrants to purchase an aggregate of 31,000,000 shares of our common stock to investors in a public offering at a price per share of $0.25 (the March 2012 Public Offering), our December 2012 issuance of 28,800,000 shares of common stock and warrants to purchase an aggregate of 14,400,000 shares of our common stock to investors in a public offering at a price per share of $0.25 (the December 2012 Public Offering), and our September 2013 issuance of 47,792,000 shares of common stock and warrants to purchase an aggregate of 23,896,000 shares of our common stock to investors in a public offering at a price per share of $0.25 (the September 2013 Public Offering). To the extent any of the warrants we have issued in those offerings are exercised, or any of our other outstanding securities convertible or exercisable into shares of our common stock are converted or exercised, our stockholders will experience dilution. We may also acquire or license other technologies or finance strategic alliances by issuing equity, as we have done through our issuance of warrants to acquire an aggregate of 4,000,000 shares of our common stock to Inovio, which may result in additional dilution to our stockholders.

Risks Related to Our Business

We have never generated revenue from our operations.

We have not generated any revenue from operations since our inception. During Fiscal 2013, we incurred a net loss of approximately $7.2 million. From inception through July 31, 2013, we incurred an aggregate loss of approximately $13.4 million. We expect that our operating expenses will continue to increase as we continue to pursue FDA approval for our product candidates.

We are an early-stage company with a limited operating history, which may hinder our ability to successfully meet our objectives.

We are an early-stage company with only a limited operating history upon which to base an evaluation of our current business and future prospects and how we will respond to competitive, financial or technological challenges. Only recently have we explored opportunities in the biomedical industry. As a result, the revenue and income potential of our business is unproven. In addition, because of our limited operating history, we have limited insight into trends that may emerge and affect our business. Errors may be made in predicting and reacting to relevant business trends and we will be subject to the risks, uncertainties and difficulties frequently encountered by early-stage companies in evolving markets. We may not be able to successfully address any or all of these risks and uncertainties. Failure to adequately do so could cause our business, results of operations and financial condition to suffer or fail.

We have not commercialized any of our potential product candidates and we cannot predict if or when we will become profitable.

We have not commercialized any product candidate relating to our current assets in the biomedical industry. Our ability to generate revenues from any of our product candidates will depend on a number of factors, including our ability to successfully complete clinical trials, obtain necessary regulatory approvals and negotiate arrangements with third parties to help finance the development of, and market and distribute, any product candidate that receives regulatory approval. In addition, we will be subject to the risk that the marketplace will not accept our products.

Because of the numerous risks and uncertainties associated with our product development and commercialization efforts, we are unable to predict the extent of our future losses or when or if we will become profitable, and it is possible we will never commercialize any of our product candidates or become profitable. Our failure to obtain regulatory approval and successfully commercialize any of our product candidates would have a material adverse effect on our business, results of operations, financial condition and prospects and could result in our inability to continue operations.

If we are unable to successfully recruit and retain qualified personnel, we may not be able to continue our operations.

In order to successfully implement and manage our business plan, we will depend upon, among other things, successfully recruiting and retaining qualified personnel having experience in the biomedical industry. Competition for qualified individuals is intense. If we are not able to find, attract and retain qualified personnel on acceptable terms, our business operations could suffer.

Additionally, although we have employment agreements with each of our executive officers, these agreements are terminable by them at will and we may not be able to retain their services. The loss of the services of any members of our senior management team could delay or prevent the development and commercialization of any other product candidates and our business could be harmed to the extent that we are not able to find suitable replacements.

Table of Contents

Future growth could strain our resources, and if we are unable to manage our growth, we may not be able to successfully implement our business plan.

We hope to experience rapid growth in our operations, which will place a significant strain on our management, administrative, operational and financial infrastructure. Our future success will depend in part upon the ability of our executive officers to manage growth effectively. This will require that we hire and train additional personnel to manage our expanding operations. In addition, we must continue to improve our operational, financial and management controls and our reporting systems and procedures. If we fail to successfully manage our growth, we may be unable to execute upon our business plan.

We may be unable to successfully develop and commercialize the assets we have acquired, or acquire, or develop and commercialize new assets and product candidates.

Our future results of operations will depend to a significant extent upon our ability to successfully develop and commercialize in a timely manner the assets we acquired from Inovio related to certain non-DNA vaccine technology and intellectual property relating to selective electrochemical tumor ablation, which we refer to as the OncoSec Medical System or OMS. In addition, we may acquire new assets or product candidates in the future. There are numerous difficulties inherent in acquiring, developing and commercializing new products and product candidates, including difficulties related to:

- successfully identifying potential product candidates;
- developing potential product candidates;
- difficulties in conducting or completing clinical trials, including receiving incomplete, unconvincing or equivocal clinical trials data;
- obtaining requisite regulatory approvals for such products in a timely manner or at all;
- acquiring, developing, testing and manufacturing products in compliance with regulatory standards in a timely manner or at all;
- being subject to legal actions brought by our competitors, which may delay or prevent the development and commercialization of new products;

- delays or unanticipated costs; and

- significant and unpredictable changes in the payer landscape, coverage and reimbursement for any products we develop.

As a result of these and other difficulties, we may be unable to develop potential product candidates using our intellectual property, and potential products in development by us may not receive timely regulatory approvals, or approvals at all, necessary for marketing by us or our third-party partners. If we do not acquire or develop product candidates, any of our product candidates are not approved in a timely fashion or at all or, when acquired or developed and approved, cannot be successfully manufactured and commercialized, our operating results would be adversely affected. In addition, we may not recoup our investment in developing products, even if we are successful in commercializing those products. Our business expenditures may not result in the successful acquisition, development or commercialization of products that will prove to be commercially successful or result in the long-term profitability of our business.

Certain of our intellectual property is licensed from Inovio pursuant to a non-exclusive license.

As we describe elsewhere in this prospectus, we have acquired certain technology and related assets from Inovio pursuant to the Asset Purchase Agreement. In connection with the closing of the Asset Purchase Agreement, we entered into a cross-license agreement with Inovio. Under the terms of the cross-license agreement, Inovio granted to us a non-exclusive, worldwide license to certain non-SECTA technology patents held by Inovio, and we granted to Inovio a limited, exclusive license to our acquired SECTA technology. While we do not currently rely on the intellectual property we have licensed from Inovio pursuant to this non-exclusive license, our product candidates may in the future utilize this intellectual property. Because the license is non-exclusive, Inovio may use its technology to compete with us. In addition, there are no restrictions on Inovio s ability to license their technology to others. As a result Inovio could license to others, including our competitors,

Table of Contents

the intellectual property rights covered by their license to us, including any of our improvements to the licensed intellectual property. In addition, either party may terminate the cross-license agreement with 30 days notice if they no longer utilize or sublicense the patent rights they have acquired pursuant to the cross-license. If either party were to terminate the cross-license agreement, they would no longer have the right to use intellectual property that is subject to the cross license.

Regulatory authorities may not approve our product candidates or the approvals we secure may be too limited for us to earn sufficient revenues.

The FDA and other foreign regulatory agencies can delay approval of or refuse to approve our product candidates for a variety of reasons, including failure to meet safety and efficacy endpoints in our clinical trials. Our product candidates may not be approved even if they achieve their endpoints in clinical trials. Regulatory agencies, including the FDA, may disagree with our trial design and our interpretation of data from preclinical studies and clinical trials. Clinical trials of our product candidates may not demonstrate that they are safe and effective to the extent necessary to obtain regulatory approvals. We have initiated three Phase II clinical trials to assess our ImmunoPulse technology in patients with metastatic melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma. If we cannot adequately demonstrate through the clinical trial process that a therapeutic product we are developing is safe and effective, regulatory approval of that product would be delayed or prevented, which would impair our reputation, increase our costs and prevent us from earning revenues. Even if a product candidate is approved, it may be approved for fewer or more limited indications than requested or the approval may be subject to the performance of significant post-marketing studies. In addition, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates. Any limitation, condition or denial of approval would have an adverse affect on our business, reputation and results of operations.

Acquisition of the OMS technology included an extensive clinical database from two Phase III clinical trials that were halted before enrollment was completed. In 2007, these two Phase III clinical trials, HNBE-01 and HNBE-02, which were designed to evaluate the use of the NeoPulse technology as a treatment for resectable recurrent and second primary squamous cell carcinomas of the head and neck were halted as a result of a recommendation from the Data Monitoring Committee (DMC). The DMC cited concerns regarding efficacy and safety, including mortality rates and enrollment futility. In the DMC s opinion, although no single parameter was sufficient to warrant recommending a review of the trial, the totality of data for these recurrent head and neck cancer studies suggested an unfavorable benefit-to-risk profile for the NeoPulse arm relative to the surgery arm. Without conducting further analysis, enrollment for both studies were halted, however the treated patients were followed up to two years to further evaluate safety and efficacy, as per the protocol, and the clinical trials were not reinitiated. We are continuing to analyze the available data from 214 patients treated in both Phase III studies. If we are unable to partner, initiate or complete new Phase III or pivotal clinical studies, we will be unable to commercialize the NeoPulse technology.

Delays in the commencement or completion of clinical testing for product candidates based on our OMS technology could result in increased costs to us and delay or limit our ability to pursue regulatory approval or generate revenues.

Clinical trials are very expensive, time consuming and difficult to design and implement. Even if the results of our proposed clinical trials are favorable, clinical trials for product candidates based on our OMS technology will continue for several years and may take significantly longer than expected to complete. Delays in the commencement or completion of clinical testing could significantly affect our product development costs and business plan. We do not know whether our Phase II clinical trials will be completed on schedule, if at all. In addition, we do not know whether any other pre-clinical or clinical trials will begin on time or be completed on schedule, if at all. The commencement and completion of clinical trials can be delayed for a number of reasons, including delays related to:

- obtaining clearance from the FDA or respective international regulatory equivalent to commence a clinical trial;

- reaching agreement on acceptable terms with prospective clinical research organizations (CROs) clinical investigators and trial sites;

- obtaining institutional review board (IRB), approval to initiate and conduct a clinical trial at a prospective site;

- identifying, recruiting and training suitable clinical investigators;

- identifying, recruiting and enrolling subjects to participate in clinical trials for a variety of reasons, including competition from other clinical trial programs for similar indications; and

Table of Contents

- retaining patients who have initiated a clinical trial but may be prone to withdraw due to side effects from the therapy, lack of efficacy, personal issues, or for any other reason they choose, or who are lost to further follow-up.

We believe that we have planned and designed an adequate clinical trial program for our product candidates based on our OMS technology. However, the FDA could determine that it is not satisfied with our plan or the details of our pivotal clinical trial protocols and designs.

Additionally, changes in applicable regulatory requirements and guidance may occur and we may need to amend clinical trial protocols to reflect these changes. Amendments may require us to resubmit our clinical trial protocols to IRBs for reexamination, which may impact the costs, timing or successful completion of a clinical trial. If we experience delays in completion of, or if we terminate, any of our clinical trials, the commercial prospects for our product candidates may be harmed, which may have a material adverse effect on our business, results of operations, financial condition and prospects.

We must rely on third parties to conduct our clinical trials. If these third parties do not successfully carry out their duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business could be substantially harmed.

We expect to enter into agreements with third-party CROs to conduct our planned clinical trials and anticipate that we may enter into other such agreements in the future regarding any future product candidates. We currently rely on these parties for the execution of our clinical and pre-clinical studies, and control only certain aspects of their activities. We, and our CROs, are required to comply with the current FDA Code of Federal Regulations for Conducting Clinical Trials and GCP and ICH guidelines. The FDA enforces these GCP regulations through periodic inspections of trial sponsors, principal investigators, CRO trial sites, laboratories, and any entity having to do with the completion of the study protocol and processing of data. If we, or our CROs, fail to comply with applicable GCP regulations, the data generated in our clinical trials may be deemed unreliable and the FDA may require us to perform additional clinical trials before approving our marketing applications. Upon inspection, the FDA and similar foreign regulators may determine that our clinical trials are not compliant with GCP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

If any of our relationships with third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs on commercially reasonable terms, or at all. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. As a result, our results of operations and the commercial prospects for our product candidates could be harmed, our costs could increase and our ability to generate additional revenues could be delayed.

We may participate in clinical trials conducted under an approved investigator sponsored investigational new drug (IND) application and correspondence and communication with the FDA pertaining to these trials will strictly be between the investigator and the FDA.

We have in the past, and may in the future, participate in clinical trials conducted under an approved investigator sponsored investigational new drug (IND) application. Regulations and guidelines imposed by the FDA with respect to IND applications include a requirement that the sponsor

of a clinical trial provide ongoing communication with the agency as it pertains to safety of the treatment. This communication can be relayed to the agency in the form of safety reports, annual reports or verbal communication at the request of the FDA. Accordingly, it is the responsibility of each investigator (as the sponsor of the trial) to be the point of contact with the FDA. The communication and information provided by the investigator may not be appropriate and accurate, and the investigator has the ultimate responsibility and final decision-making authority with respect to submissions to the FDA. This may result in reviews, audits, delays or clinical holds by the FDA ultimately affecting the timelines for these studies and potentially risking the completion of these trials.

We may incur liability if our promotions of product candidates are determined, or are perceived, to be inconsistent with regulatory guidelines.

The FDA provides guidelines with respect to appropriate product promotion and continuing medical and health education activities. Although we endeavor to follow these guidelines, the FDA or the Office of the Inspector General: U.S. Department of Health and Human Services may disagree, and we may be subject to significant liability, including civil and administrative remedies as well as criminal sanctions. In addition, management s attention could be diverted and our reputation could be damaged.

Table of Contents

If we and the contract manufacturers upon whom we rely fail to produce our systems and product candidates in the volumes that we require on a timely basis, or fail to comply with stringent regulations, we may face delays in the development and commercialization of our electroporation equipment and product candidates.

We currently assemble certain components of our electroporation systems and utilize the services of contract manufacturers to manufacture the remaining components of these systems and our product supplies for clinical trials. We expect to increase our reliance on third party manufacturers if and when we commercialize our products and systems. The manufacture of our systems and product supplies requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers often encounter difficulties in production, particularly in scaling up for commercial production. These problems include difficulties with production costs and yields, quality control, including stability of the equipment and product candidates and quality assurance testing, shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. If we or our manufacturers were to encounter any of these difficulties or our manufacturers otherwise fail to comply with their obligations to us, our ability to provide our electroporation equipment to our partners and products to patients in our clinical trials or to commercially launch a product would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of our clinical trials, increase the costs associated with maintaining our clinical trial program and, depending upon the period of delay, require us to commence new trials at significant additional expense or terminate the trials completely.

In addition, all manufacturers of our products must comply with cGMP requirements enforced by the FDA through its facilities inspection program. These requirements include, among other things, quality control, quality assurance and the generation and maintenance of records and documentation. Manufacturers of our products may be unable to comply with these cGMP requirements and with other FDA, state and foreign regulatory requirements. We have little control over our manufacturers compliance with these regulations and standards. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of any product is compromised due to our or our manufacturers failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize our products, and we may be held liable for any injuries sustained as a result. Any of these factors could cause a delay of clinical trials, regulatory submissions, approvals or commercialization of our products, entail higher costs or result in our being unable to effectively commercialize our products. Furthermore, if our manufacturers fail to deliver the required commercial quantities on a timely basis, pursuant to provided specifications and at commercially reasonable prices, we may be unable to meet demand for our products and would lose potential revenues.

If any product candidate for which we receive regulatory approval does not achieve broad market acceptance or coverage by third-party payors, our revenues may be limited.

The commercial success of any potential product candidates for which we obtain marketing approval from the FDA or other regulatory authorities will depend upon the acceptance of these products by physicians, patients, healthcare payors and the medical community. Coverage and reimbursement of our approved product by third-party payors is also necessary for commercial success. The degree of market acceptance of any potential product candidates for which we may receive regulatory approval will depend on a number of factors, including:

- our ability to provide acceptable evidence of safety and efficacy;

- acceptance by physicians and patients of the product as a safe and effective treatment;

- the prevalence and severity of adverse side effects;
- limitations or warnings contained in a product s FDA-approved labeling;
- the clinical indications for which the product is approved;
- availability and perceived advantages of alternative treatments;
- any negative publicity related to our or our competitors products;

Table of Contents

- the effectiveness of our or any current or future collaborators sales, marketing and distribution strategies;

- pricing and cost effectiveness;

- our ability to obtain sufficient third-party payor coverage or reimbursement; and

- the willingness of patients to pay out of pocket in the absence of third-party payor coverage.

Our efforts to educate the medical community and third-party payors on the benefits of any of our potential product candidates for which we obtain marketing approval from the FDA or other regulatory authorities may require significant resources and may never be successful. If our potential products do not achieve an adequate level of acceptance by physicians, third-party payors and patients, we may not generate sufficient revenue from these products to become or remain profitable.

We may not be successful in executing our strategy for the commercialization of our product candidates. If we are unable to successfully execute our commercialization strategy, we may not be able to generate significant revenue.

We intend to advance a commercialization strategy that leverages previous in-depth clinical experiences, previous CE (Conformité Européene) approvals for the electroporation-based devices and late stage clinical studies in the United States (Phase III) and Europe (Phase IV). This strategy includes seeking approval from the FDA to initiate pivotal registration studies in the United States for select rare cancers that have limited, adverse or no therapeutic alternatives. This strategy also includes expanding the addressable markets for the OMS therapies through the addition of relevant indications. Our commercialization plan also includes partnering and/or co-developing OMS in developing geographic locations, such as Eastern Europe and Asia, where local resources are best leveraged and appropriate collaborators can be secured.

We may not be able to implement our commercialization strategy as we have planned. Further, we have little experience and have not proven our ability to succeed in the biomedical industry and are not certain that our implementation strategy, if implemented correctly, would lead to significant revenue. If we are unable to successfully implement our commercialization plans and drive adoption by patients and physicians of our potential future products through our sales, marketing and commercialization efforts, then we will not be able to generate significant revenue which will have a material adverse effect on our business, results of operations, financial condition and prospects.

In order to market our proprietary products, we may choose to establish our own sales, marketing and distribution capabilities. We have no experience in these areas, and if we have problems establishing these capabilities, the commercialization of our products would be impaired.

We may choose to establish our own sales, marketing and distribution capabilities to market products to our target markets. We have no experience in these areas, and developing these capabilities will require significant expenditures on personnel and infrastructure. While we intend to market products that are aimed at a small patient population, we may not be able to create an effective sales force around even a niche market. In addition, some of our product candidates may require a large sales force to call on, educate and support physicians and patients. We may desire in the future to enter into collaborations with one or more pharmaceutical companies to sell, market and distribute such products, but we may not be able to enter into any such arrangement on acceptable terms, if at all. Any collaboration we do enter into may not be effective in generating meaningful product royalties or other revenues for us.

Our success depends in part on our ability to protect our intellectual property. Because of the difficulties of protecting our proprietary rights and technology, we may not be able to ensure their protection.

Our commercial success will depend in large part on obtaining and maintaining patent, trademark and trade secret protection of our product candidates and their respective components, formulations, manufacturing methods and methods of treatment, as well as successfully defending these patents against third-party challenges. Our ability to stop third parties from making, using, selling, offering to sell or importing our product candidates is dependent upon the extent to which we have rights under valid and enforceable patents or trade secrets that cover these activities.

The coverage claimed in a patent application typically is significantly reduced before a patent is issued, either in the United States or abroad. Consequently, any of our pending or future patent applications may not result in the issuance of patents and any patents issued may be subjected to further proceedings limiting their scope and may in any event not contain claims broad enough to provide meaningful protection. Any patents that are issued to us or our future collaborators may not provide significant proprietary protection or competitive advantage, and may be circumvented or invalidated. In addition,

Table of Contents

unpatented proprietary rights, including trade secrets and know-how, can be difficult to protect and may lose their value if they are independently developed by a third party or if their secrecy is lost. Further, because development and commercialization of our potential product candidates can be subject to substantial delays, our patents may expire and provide only a short period of protection, if any, following any future commercialization of products. Moreover, obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by government patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements. If any of our patents are found to be invalid or unenforceable, or if we are otherwise unable to adequately protect our rights, it could have a material adverse impact on our business and our ability to commercialize or license our technology and products.

We may incur substantial costs as a result of litigation or other proceedings relating to protection of our patent and other intellectual property rights, and we may be unable to successfully protect our rights to our potential products and technology.

If we choose to go to court to stop a third party from using the inventions claimed by our patents, that third party may ask the court to rule that the patents are invalid and/or should not be enforced. These lawsuits are expensive and could consume time and other resources even if we were successful in stopping the infringing activity. In addition, the court could decide that our patents are not valid and that we do not have the right to stop others from using the inventions claimed by the patents.

Additionally, even if the validity of these patents is upheld, the court could refuse to stop a third party s infringing activity on the ground that such activities do not infringe our patents. The U.S. Supreme Court has recently revised certain tests regarding granting patents and assessing the validity of patents to make it more difficult to obtain patents. As a consequence, issued patents may be found to contain invalid claims according to the newly revised standards. Some of our patents may be subject to challenge and subsequent invalidation or significant narrowing of claim scope in a reexamination proceeding, or during litigation, under the revised criteria.

Third parties may claim that we infringe their proprietary rights and may prevent us from manufacturing and selling some of our products.

The manufacture, use and sale of new products that are the subject of conflicting patent rights have been the subject of substantial litigation in the biomedical industry. These lawsuits relate to the validity and infringement of patents or proprietary rights of third parties. Litigation may be costly and time-consuming, and could divert the attention of our management and technical personnel. In addition, if we infringe on the rights of others, we could lose our right to develop, manufacture or market products or could be required to pay monetary damages or royalties to license proprietary rights from third parties. Although the parties to patent and intellectual property disputes in the biomedical industry have often settled their disputes through licensing or similar arrangements, the costs associated with these arrangements may be substantial and could include ongoing royalties. Furthermore, we cannot be certain that the necessary licenses would be available to us on commercially reasonable terms or at all. As a result, an adverse determination in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent us from manufacturing and selling our products, and could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Extensive industry regulation has had, and will continue to have, a significant impact on our business, especially our product development, manufacturing and distribution capabilities.

All biomedical companies are subject to extensive, complex, costly and evolving government regulation. For the U.S., these regulations are principally administered by the FDA and to a lesser extent by the United States Drug Enforcement Agency (the DEA) and state government agencies, as well as by various regulatory agencies in foreign countries where products or product candidates are being manufactured and/or marketed. The Federal Food, Drug and Cosmetic Act, the Controlled Substances Act and other federal statutes and regulations, and similar foreign statutes and regulations, govern or influence the testing, manufacturing, packing, labeling, storing, record keeping, safety, approval, advertising, promotion, sale and distribution of our products. Under these regulations, we may become subject to periodic inspection of our facilities, procedures and operations and/or the testing of our product candidates and products by the FDA, the DEA and other authorities, which conduct periodic inspections to confirm that we are in compliance with all applicable regulations. In addition, the FDA and foreign regulatory agencies conduct pre-approval and post-approval reviews and plant inspections to determine whether our systems and processes are in compliance with cGMP and other regulations. Following such inspections, the FDA or other agency may issue observations, notices, citations and/or warning letters that could cause us to modify certain activities identified during the inspection. To the extent that we successfully commercialize any product, we may also be subject to ongoing FDA obligations and continued regulatory review with respect to manufacturing, processing,

Table of Contents

labeling, packaging, distribution, storage, advertising, promotion and recordkeeping for the product. Additionally, we may be required to conduct potentially costly post-approval studies and report adverse events associated with our products to FDA and other regulatory authorities. Unexpected or serious health or safety concerns would result in labeling changes, recalls, market withdrawals or other regulatory actions.

The range of possible sanctions includes, among others, FDA issuance of adverse publicity, product recalls or seizures, fines, total or partial suspension of production and/or distribution, suspension of the FDA s review of product applications, enforcement actions, injunctions, and civil or criminal prosecution. Any such sanctions, if imposed, could have a material adverse effect on our business, operating results, financial condition and cash flows. Under certain circumstances, the FDA also has the authority to revoke previously granted drug approvals. Similar sanctions as detailed above may be available to the FDA under a consent decree, depending upon the actual terms of such decree. If internal compliance programs do not meet regulatory agency standards or if compliance is deemed deficient in any significant way, it could materially harm our business.

Moreover, the regulations, policies or guidance of the FDA or other regulatory agencies may change and new or additional statutes or government regulations may be enacted that could prevent or delay regulatory approval of our product candidates or further restrict or regulate post-approval activities. If we are not able to achieve and maintain regulatory compliance, we may not be permitted to market our potential product candidates, which would adversely affect our ability to generate revenue and achieve or maintain profitability.

We face potential product liability exposure and if successful claims are brought against us, we may incur substantial liability.

The clinical use of our product candidates exposes us to the risk of product liability claims. Any side effects, manufacturing defects, misuse or abuse associated with our product candidates could result in injury to a patient or even death. In addition, a liability claim may be brought against us even if our product candidates merely appear to have caused an injury. Product liability claims may be brought against us by consumers, healthcare providers, pharmaceutical companies or others coming into contact with our product candidates, among others.

Regardless of merit or potential outcome, product liability claims against us may result in, among other effects, the inability to commercialize our product candidates, impairment of our business reputation, withdrawal of clinical trial participants and distraction of management s attention from our primary business. If we cannot successfully defend ourselves against product liability claims we could incur substantial liabilities.

The biomedical industry is highly competitive.

The biomedical industry has an intensely competitive environment that will require an ongoing, extensive search for technological innovations and the ability to market products effectively, including the ability to communicate the effectiveness, safety and value of products to healthcare professionals in private practice, group practices and payers in managed care organizations, group purchasing organizations and Medicare & Medicaid services. We face competition from a number of sources, including large pharmaceutical companies, biotechnology companies, academic institutions, government agencies and private and public research institutions. We are smaller than almost all of our competitors. Most of our competitors have been in business for a longer period of time than us, have a greater number of products on the market and have greater financial and other resources than we do. Furthermore, recent trends in this industry are that large drug companies are consolidating into a smaller number of very large entities, which further concentrates financial, technical and market strength and increases competitive pressure in the industry. If we directly compete with these very large entities for the same markets and/or products, their financial strength could prevent us

from capturing a share of those markets. It is possible that developments by our competitors will make any products or technologies that we develop or acquire noncompetitive or obsolete.

If our competitors market and/or develop competing product candidates that are marketed more effectively, approved more quickly or demonstrated to be safer or more effective than our product candidates, then our commercial opportunities may be reduced or eliminated.

The biomedical industry is characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary therapeutics. If we are able to obtain regulatory approval of our product candidates related to our OMS technology or any assets we may acquire in the future, we will face competition from products currently marketed by companies much larger than us that address our targeted indications.

Table of Contents

In addition to already marketed products, we also face competition from product candidates that are or could be under development. We expect our product candidates, if approved and commercialized, to compete on the basis of, among other things, product efficacy and safety, time to market, price, patient reimbursement by third-party payors, extent of adverse side effects and convenience of treatment procedures. We may not be able to effectively compete in one or more of these areas. We also may not be able to differentiate any products that we are able to market from those of our competitors or successfully develop or introduce new products that are less costly or offer better results than those of our competitors.

Additionally, our competitors may obtain regulatory approval of their products more rapidly than we are able to or may obtain patent protection or other intellectual property rights that limit or block us from developing or commercializing our product candidates. Our competitors may also develop products that are more effective, more useful, better tolerated, subject to fewer or less severe side effects, more widely prescribed or accepted or less costly than ours and may also be more successful than us in manufacturing and marketing their products. If we are unable to compete effectively with the marketed therapeutics of our competitors or if such competitors are successful in developing products that compete with our potential product candidates that are approved, our business, results of operations, financial condition and prospects may be materially adversely affected.

If we fail to comply with federal and state healthcare laws, including fraud and abuse and health information privacy and security laws, we could face substantial penalties and our business, results of operations, financial condition and prospects could be adversely affected.

Even though we do not and will not control referrals of healthcare services or bill directly to third-party payors, certain federal and state healthcare laws and regulations pertaining to fraud and abuse and patients rights may be applicable to our business. We could be subject to healthcare fraud and abuse and patient privacy regulation by both the federal government and the states in which we conduct our business. To the extent that any product we make is sold in a foreign country, we also may be subject to foreign laws and regulations. If we or our operations are found to be in violation of any of these laws or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from participation in U.S. federal or state health care programs, and the curtailment or restructuring of our operations. Any penalties, damages, fines, curtailment or restructuring of our operations could materially adversely affect our ability to operate our business and our financial results. Further, any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management s attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state privacy, security and fraud laws may prove costly.

We may engage in strategic transactions that could impact our liquidity, increase our expenses and present significant distractions to our management.

From time to time we may consider engaging in strategic transactions, such as acquisitions of companies, asset purchases and out-licensing or in-licensing of products, product candidates or technologies. Any such transaction may require us to incur non-recurring or other charges, may increase our near and long-term expenditures and may pose significant integration challenges or disrupt our management or business, which could adversely affect our operations and financial results. For example, these transactions may entail numerous operational and financial risks, including, among others, exposure to unknown liabilities, disruption of our business and diversion of our management s time and attention in order to develop acquired products, product candidates or technologies, difficulty and cost in combining the operations and personnel of any acquired businesses with our operations and personnel, and inability to retain key employees of any acquired businesses. Accordingly, although we may not choose to undertake or may not be able to successfully complete any transactions of the nature described above, any transactions that we do complete could have a material adverse effect on our business, results of operations, financial condition and prospects.

Our business and operations would suffer in the event of system failures.

Despite the implementation of security measures, our internal computer systems and those of our current and any future partners, contractors and consultants are vulnerable to damage from cyber-attacks, computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. System failures, accidents or security breaches could cause interruptions in our operations, and could result in a material disruption of our commercialization activities, development programs and our business operations, in addition to possibly requiring substantial expenditures of resources to remedy. The loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the commercialization of any potential product candidate could be delayed.

Table of Contents

If we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results. As a result, current and potential stockholders could lose confidence in our financial reporting, which would harm our business.

Effective internal controls are necessary for us to provide reliable financial reports. If we cannot provide reliable financial reports, our operating results could be misstated, our reputation may be harmed and the trading price of our stock could be negatively affected. Our controls over financial processes and reporting may not continue to be effective, or we may identify additional material weaknesses or significant deficiencies in our internal controls in the future. Any failure to remediate any future material weaknesses or implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results, cause us to fail to meet our reporting obligations or result in material misstatements in our financial statements or other public disclosures. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock.

Maintaining compliance with our obligations as a public company may strain our resources and distract management, and if we do not remain compliant our stock price may be adversely affected.

We are required to evaluate our internal control systems in order to allow management to report on our internal controls as required by Section 404 of the Sarbanes-Oxley Act of 2002, and our management is required to attest to the adequacy of our internal controls. Recent SEC pronouncements suggest that in the next several years we may be required to report our financial results using new International Financial Reporting Standards, replacing GAAP, which would require us to make significant investments in training, hiring, consulting and information technology, among other investments. All of these and other reporting requirements and heightened corporate governance obligations that we face, or will face, will further increase the cost to us, perhaps substantially, of remaining compliant with our obligations under the Securities Exchange Act of 1934, as amended (the Exchange Act) and other applicable laws, including the Sarbanes-Oxley Act and the Dodd-Frank Act of 2010. In order to meet these incremental obligations, we will need to invest in our corporate and accounting infrastructure and systems, and acquire additional services from third party auditors and advisors. As a result of these requirements and investments, we may incur significant additional expenses and may suffer a significant diversion of management s time. There is no guarantee that we will be able to continue to meet these obligations in a timely manner, and we could therefore be subject to sanctions or investigation by regulatory authorities such as the SEC. Any such actions could adversely affect the market price of our common stock, perhaps significantly.

Risks Related to our Common Stock

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

The continued operation and expansion of our business will require substantial funding. Investors seeking cash dividends in the foreseeable future should not purchase our common stock. We have paid no cash dividends on any of our capital stock to date and we currently intend to retain our available cash to fund the development and growth of our business. Any determination to pay dividends in the future will be at the discretion of our Board of Directors and will depend upon results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors our Board of Directors deems relevant. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock, which may never occur.

If we issue additional shares in the future, our existing stockholders will be diluted.

Our articles of incorporation authorize the issuance of up to 3,200,000,000 shares of common stock with a par value of $0.0001 per share. In addition to capital raising activities, other possible business and financial uses for our authorized common stock include, without limitation, future stock splits, acquiring other companies, businesses or products in exchange for shares of common stock, issuing shares of our common stock to partners in connection with strategic alliances, attracting and retaining employees by the issuance of additional securities under our various equity compensation plans, or other transactions and corporate purposes that our Board of Directors deems are in the Company s best interest. Additionally, shares of common stock could be used for anti-takeover purposes or to delay or prevent changes in control or management of the Company. We cannot provide assurances that any issuances of common stock will be consummated on favorable terms or at all, that they will enhance stockholder value, or that they will not adversely affect our business or the trading price of our common stock. The issuance of any such shares will reduce the book value per share and may contribute to a reduction in the market price of the outstanding shares of our common stock. If we issue any such additional shares, such issuance will reduce the proportionate ownership and voting power of all current stockholders. Further, such issuance may result in a change of control of our corporation.

Table of Contents

Sales of common stock by our stockholders, or the perception that such sales may occur, could depress our stock price.

Sales of our common stock in the public market following this offering could lower the market price of our common stock. Sales may also make it more difficult for us to sell equity securities or equity-related securities in the future at a time and price that our management deems acceptable or at all.

In addition, the market price of our common stock could decline as a result of sales by, or the perceived possibility of sales by, our existing stockholders. Since March 2011, we have completed a number of offerings of our common stock and warrants and as of December 5, 2013, have issued an aggregate of 201,419,600 shares of our common stock, including common stock underlying warrants. Future sales of common stock by significant stockholders, including by those who acquired their shares in our prior offerings or who are affiliates, or the perception that such sales may occur, could depress the price of our common stock.

If outstanding options and warrants to purchase shares of our common stock are exercised, the interests of our stockholders could be diluted.

As of December 5, 2013, in addition to 171,038,526 shares of common stock issued and outstanding, we currently have 9,000,000 shares reserved for issuance under equity compensation plan for vested and unvested stock options. We also have 79,397,574 shares reserved for issuance on the exercise of outstanding warrants as of such date. We may elect to reduce the exercise price of outstanding warrants as a means of providing additional financing to us. The exercise of options and warrants, and the sale of shares underlying such options or warrants, could have an adverse effect on the market for our common stock, including the price that an investor could obtain for their shares. Investors may experience dilution in the net tangible book value of their investment upon the exercise of outstanding options and warrants granted under our stock option plans, and options and warrants that may be granted or issued in the future.

Trading of our stock is restricted by the SEC s penny stock regulations and certain FINRA rules, which may limit a stockholder s ability to buy and sell our common stock.

Our securities are covered by certain penny stock rules, which impose additional sales practice requirements on broker-dealers who sell low-priced securities to persons other than established customers and accredited investors. For transactions covered by these rules, a broker-dealer must make a special suitability determination for the purchaser and have received the purchaser s written consent to the transaction prior to sale, among other things. In addition, the penny stock rules require a broker-dealer, before effecting a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document prepared by the SEC that provides information about penny stocks and the nature and level of risks in the penny stock market. The broker-dealer also must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction, and monthly account statements showing the market value of each penny stock held in the customer s account. The bid and offer quotations, and the broker-dealer and salesperson compensation information, must be given to the customer orally or in writing before effecting the transaction, and must be given to the customer in writing before or with the customer s confirmation. These rules may affect the ability of broker-dealers and holders to sell our common stock and may negatively impact the level of trading activity for our common stock. To the extent our common stock remains subject to the penny stock regulations, such regulations may discourage investor interest in and adversely affect the market liquidity of our common stock.

The Financial Industry Regulatory Authority (known as FINRA) has adopted rules that require that in recommending an investment to a customer, a broker-dealer must have reasonable grounds for believing that the investment is suitable for that customer. Prior to recommending speculative low priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer s financial status, tax status, investment objectives and other information. Under interpretations of these rules, FINRA believes that there is a high probability that speculative low priced securities will not be suitable for at least some customers. FINRA requirements make it more difficult for broker-dealers to recommend that their customers buy our common stock, which may limit your ability to buy and sell our stock and have an adverse effect on the market for our shares.

Table of Contents

Our common stock is illiquid and the price of our common stock may be negatively impacted by factors which are unrelated to our operations.

Our common stock only recently began quoting on the OTC Markets Group, Inc. s OTCQB tier (OTCQB), and has a limited trading history on that market. Trading of securities quoted on OTCQB is frequently highly volatile, with low trading volume. Since our common stock became available for trading on the OTCQB, we have experienced significant fluctuations in the stock price and trading volume of our common stock. There is no assurance that a sufficient market will develop in our stock, in which case it could be difficult for stockholders to sell their stock. The market price of our common stock could continue to fluctuate substantially.

Factors affecting the trading price of our common stock may include:

- adverse research and development or clinical trial results;
- our inability to obtain additional capital;
- announcement that the FDA denied our request to approve our products for commercialization in the United States, or similar denial by other regulatory bodies which make independent decisions outside the United States;
- potential negative market reaction to the terms or volume of any issuance of shares of our stock to new investors or service providers;
- sales of substantial amounts of our common stock, or the perception that substantial amounts of our common stock will be sold, by our stockholders in the public market;
- declining working capital to fund operations, or other signs of apparent financial uncertainty;
- significant advances made by competitors that adversely affect our potential market position; and
- the loss of key personnel and the inability to attract and retain additional highly-skilled personnel.

Additionally, our clinical trials will be open-ended and, therefore, there is the possibility that information regarding the success (or setbacks) of our clinical trials may be obtained by the public prior to a formal announcement by us.

SPECIAL NOTICE REGARDING FORWARD-LOOKING STATEMENTS

Information contained in this prospectus may contain forward-looking statements. Except for the historical information contained in this discussion of the business and the discussion and analysis of financial condition and results of operations, the matters discussed herein are forward looking statements. This information may involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from future results, performance or achievements expressed or implied by any forward-looking statements. Forward-looking statements, which involve assumptions and describe our future plans, strategies and expectations, are generally identifiable by use of the words may, will, should, expect, anticipate, estimate, believe, intend or proje negative of these words or other variations on these words or comparable terminology. In addition to the risks and uncertainties described in Risk Factors above and elsewhere in this prospectus, these risks and uncertainties may include consumer trends, business cycles, scientific developments, changes in governmental policy and regulation, and general economic developments. Forward-looking statements are based on assumptions that may be incorrect, and there can be no assurance that any projections or other expectations included in any forward-looking statements will come to pass. Our actual results could differ materially from those expressed or implied by the forward-looking statements as a result of various factors. Except as required by applicable laws, we undertake no obligation to update publicly any forward-looking statements for any reason, even if new information becomes available or other events occur in the future.

Table of Contents

SELLING STOCKHOLDERS

This prospectus covers the resale from time to time by the selling stockholders identified in the table below of:

- Up to 4,000,000 issued and outstanding shares of our common stock sold to investors in the June 2011 Private Placement (all of which have been resold by the selling stockholders as of December 5, 2013);

- Up to 4,000,000 shares of our common stock issuable upon exercise of Series A warrants sold to investors in the June 2011 Private Placement;

- Up to 240,000 shares of our common stock issuable upon exercise of warrants issued to the placement agents or their respective designees for services rendered in connection with the June 2011 Private Placement; and

- Up to 200,000 issued and outstanding shares of our common stock issued to a consulting firm in connection with its performance of consulting services.

Pursuant to the Registration Rights Agreement executed in connection with the June 2011 Private Placement, we have filed with the SEC a registration statement on Form S-1 (and post-effective amendments thereto pursuant to applicable SEC rules and regulations), of which this prospectus forms a part, under the Securities Act to register these resales. We have also agreed to cause such registration statement to become effective, and to keep such registration statement effective as set forth in the Registration Rights Agreement. Our failure to satisfy the deadlines set forth in the Registration Rights Agreement may subject us to payment of certain monetary penalties pursuant to the terms of the Registration Rights Agreement.

The selling stockholders identified in the table below may from time to time offer and sell under this prospectus any or all of the shares of common stock described under the column Shares of Common Stock Being Offered in this Offering in the table below. The table below has been prepared based upon the information furnished to us by the selling stockholders as of October 22, 2013. The selling stockholders identified below may have sold, transferred or otherwise disposed of some or all of their shares since the date on which the information in the following table is presented in transactions exempt from or not subject to the registration requirements of the Securities Act. Information concerning the selling stockholders may change from time to time and, if necessary, we will amend or supplement this prospectus accordingly.

We have been advised, as noted in the footnotes in the table below, that two of the selling stockholders are broker-dealers and/or underwriters and that certain of the selling stockholders are affiliates of a broker-dealer and/or underwriter. We have been advised that each of these selling stockholders acquired our warrants in the ordinary course of business, not for resale, and that none of these selling stockholders had, at the time of purchase, any agreements or understandings, directly or indirectly, with any person to distribute the related common stock.

The following table and disclosure following the table sets forth the name of each selling stockholder, the nature of any position, office or other material relationship, if any, which the selling stockholder has had, within the past three years, with us or with any of our predecessors or affiliates, and the number of shares of our common stock beneficially owned by the stockholder before this offering. The number of shares owned are those beneficially owned, as determined under the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under these rules, beneficial ownership includes any shares of common stock as to which a person has sole or shared voting power or investment power and any shares of common stock which the person has the right to acquire within 60 days of December 5, 2013 through the exercise of any option, warrant or right, through conversion of any security or pursuant to the automatic termination of a power of attorney or revocation of a trust, discretionary account or similar arrangement. Unless otherwise indicated in the footnotes to this table and subject to community property laws where applicable, we believe that each of the selling stockholders named in this table has sole voting and investment power with respect to the shares indicated as beneficially owned.

We have assumed all shares of common stock reflected on the table will be sold from time to time in the offering covered by this prospectus. We cannot provide an estimate as to the number of shares of common stock that will be held by the selling stockholders upon termination of the offering covered by this prospectus because the selling stockholders may offer some or all of their shares of common stock under this prospectus.

Table of Contents

Selling Stockholder	Shares of Common Stock Owned Before this Offering §	Shares of Common Stock Underlying Warrants Owned Before this Offering	Shares of Common Stock Being Offered in this Offering	Shares of Common Stock Owned Upon Completion of this Offering (a) §	Percentage of Common Stock Outstanding Upon Completion of this Offering (b) §
Capital Ventures International (1)	5,379,200	8,800,000	2,000,000	12,179,200	6.9%
Hudson Bay Master Fund Ltd. (2)	0	2,500,000	2,000,000	500,000	
OTA LLC (3)(6)	0	108,000	108,000		
Noam Rubinstein (3)	0	407,800	14,400	393,400	
Kira Sheinerman (3)	0	184,350	21,600	162,750	
Roth Capital Partners, LLC (3)(5)	0	96,000	96,000		
Vista Partners LLC (4)	200,000	0	200,000		

The selling stockholder is a broker-dealer.

The selling stockholder is an affiliate of a broker-dealer.

§ Based upon limited information provided to us by the selling stockholders as of October 22, 2013; provided, however, that no information was provided by the selling stockholders regarding any sales by such selling stockholders prior to the date of this prospectus of our securities that they have acquired in subsequent public offerings of our securities that are unrelated to the June 2011 Private Placement and are not registered on the registration statement of which the prospectus forms a part, and this table assumes that none of those securities have been resold by the selling stockholders. As of the date of effectiveness of the Initial Registration Statement on October 24, 2011, the selling stockholders that participated in the June 2011 Private Placement owned no securities of the Company other than those acquired in connection with the June 2011 Private Placement, and Vista Partners LLC owned no securities of the Company other than those issued by us pursuant to the terms of its consulting agreement. Certain of the selling stockholders have elected to participate in certain of our subsequent public offerings, with Capital Ventures International purchasing 13,600,000 shares of our common stock and warrants to purchase up to an aggregate of 6,800,000 shares of our common stock and Hudson Bay Master Fund Ltd. purchasing 1,600,000 shares of our common stock and warrants to purchase up to an aggregate of 1,000,000 shares of our common stock in such subsequent offerings. The shares of common stock and the shares underlying the warrants issued and sold to such selling stockholders in those subsequent offerings are not being registered by the registration statement of which this prospectus forms a part, and have been registered under the Securities Act under one or more registration statements unrelated hereto. The information in this table does not reflect any of the Company s securities that the selling stockholders may acquire after the date of this prospectus (other than any shares of our common stock that may be issued as a result of the conversion or exercise of previously acquired securities reflected herein).

(a) Assumes that (i) all of the shares of common stock to be registered in the registration statement of which this prospectus is a part, including all shares of common stock underlying warrants held by the selling stockholders and offered hereby, are sold in the offering, (ii) the selling stockholders do not acquire additional shares of our common stock after the date of this prospectus and prior to completion of the offering.

(b) Applicable percentage ownership is based on the sum of (i) 171,038,526 shares of common stock outstanding as of December 5, 2013, and (ii) the number of shares of common stock issuable upon exercise of the warrants or conversion of the convertible securities held by the applicable selling stockholder. The warrants held by the selling stockholders, including those registered in the registration statement of which this prospectus forms a part, include certain exercise limitations, such that the holders thereof may not exercise any such warrants if the conversion or exercise results in the holder becoming the beneficial owner of more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to such conversion or exercise, provided that upon at least 61 days prior notice to us, the holder may increase or decrease such limitation up to a maximum of 9.99% of the number of shares of common stock outstanding.

(1) Includes (a) 2,000,000 shares of common stock issuable upon exercise of the Series A Warrants issued in connection with the June 2011 Private Placement, and (b) 5,379,200 shares of common stock and warrants to purchase up to an

20

Table of Contents

aggregate of 6,800,000 shares of our common stock issued in connection with subsequent public offerings of our securities. Heights Capital Management, Inc., the authorized agent of Capital Ventures International, has discretionary authority to vote and dispose of the shares held by Capital Ventures International and may be deemed to be the beneficial owner of these shares. Martin Kobinger, in his capacity as Investment Manager of Heights Capital Management, Inc., may also be deemed to have investment discretion and voting power over the shares held by Capital Ventures International. Mr. Kobinger disclaims any such beneficial ownership of the shares.

(2) Includes (a) 2,000,000 shares of common stock issuable upon exercise of the Series A Warrants issued in connection with the June 2011 Private Placement, and (b) warrants to purchase up to an aggregate of 500,000 shares of our common stock issued in connection with subsequent public offerings of our securities. Hudson Bay Capital Management LP, the investment manager of Hudson Bay Master Fund Ltd., has voting and investment power over the securities help by Hudson Bay Master Fund Ltd. Sander Gerber is the managing member of Hudson Bay Capital GP LLC, which is the general partner of Hudson Bay Capital Management LP. Sander Gerber disclaims beneficial ownership over these securities.

(3) Pursuant to the terms of the Placement Agent Agreement, Rodman, a former registered broker dealer, received warrants to purchase 144,000 shares of common stock and a co-placement agent, Roth Capital Partners, LLC (Roth), received warrants to purchase 96,000 shares of common stock for financial advisory services provided in connection with the June 2011 Private Placement. Rodman designated warrants to purchase 14,400 shares of common stock to Noam Rubinstein and 21,600 shares of common stock to Kira Sheinerman. We issued the remaining warrants to purchase 108,000 shares of our common stock to Rodman pursuant to the Placement Agent Agreement, and such warrants were subsequently assigned to OTA, LLC. Each of the warrants has an exercise price of $1.20 per share. We also paid placement agent fees to Rodman and Roth pursuant to the Placement Agent Agreement. Rodman received $108,000 in fees and $30,000 in expense reimbursements. Roth received $72,000 in fees.

As of the date of this prospectus, Mr. Rubinstein and Ms. Sheinerman have also been issued warrants to purchase 393,400 and 162,750 shares of our common stock, respectively, as designees of the placement agent in subsequent public offerings of our securities that are not registered under the registration statement of which this prospectus forms a part.

(4) Includes 200,000 shares of our common stock issued to Vista Partners LLC pursuant to our consulting agreement with Vista Partners LLC. Vista Partner LLC did not participate in the June 2011 Private Placement. Vista Partners LLC has discretionary authority to vote and dispose of the shares held by Vista Partners LLC and may be deemed to be the beneficial owner of these shares. Ross Silver, in his capacity as managing director of Vista Partners LLC, has sole voting and dispositive powers over the shares held by Vista Partners LLC. Mr. Silver disclaims beneficial ownership of these securities. We made one payment of $12,500 to Vista for reimbursement of expenses under the consulting agreement. We are not obligated to make any further payments to Vista for its services under the consulting agreement other than the reimbursement of reasonable expenses.

(5) Each of Bryon Roth and Gordon Roth has voting and investment control over the securities beneficially owned by Roth.

(6) Ira Leventhal is the Senior Managing Director of OTA LLC and has voting and dispositive control over the shares originally issued to Rodman and beneficially owned by OTA LLC.

Other than as described in the above table and accompanying footnotes or as further described below, (a) we have not made, and are not required to make, any potential payments to any selling stockholder, any affiliate of a selling stockholder, or any person with whom any selling stockholder has a contractual relationship regarding the transactions and (b) other than in connection with the June 2011 Private Placement or our subsequent public offerings, or in the case of Vista, entry into the consulting agreement with us, the selling stockholders have not had, and do not have, any material relationship with us except for their ownership of our common stock.

The holders of the warrants issued in the June 2011 Private Placement have ongoing rights to exercise the warrants during their term of exercise. We have disclosed the material terms of the warrants issued in the June 2011 Private Placement elsewhere in this prospectus. In addition, the participants in the June 2011 Private Placement have ongoing registration rights related to the securities issued in the June 2011 Private Placement pursuant to the terms of the Registration Rights Agreement, and Vista has certain registration rights pursuant to the terms of the consulting agreement.

21

Table of Contents

We may be required to make certain payments to the investors in the June 2011 Private Placement under certain circumstances pursuant to the terms of the Securities Purchase Agreement and the Registration Rights Agreement. These potential payments include: (a) potential liquidated damages for failure to register the common stock issued or issuable upon exercise of warrants to the investors in the June 2011 Private Placement (such liquidated damages not to exceed 9% of the aggregate subscription amount paid by each investor in the June 2011 Private Placement); (b) amounts payable if we fail to timely deliver certificates representing the required number of shares upon exercise of the Series A Warrants; and (c) amounts payable if we or our transfer agent fail to timely remove certain restrictive legends from certificates representing shares issued or issuable in the June 2011 Private Placement. We intend to comply with the requirements of the Registration Rights Agreement and do not currently expect to make any such payments; however, it is possible that such payments may be required.

The Securities Purchase Agreement granted to the investors, until the eighteen month anniversary of the date of the agreement, the right to participate in any financing by us through an issuance of our common stock for cash or indebtedness up to an amount equal to 50% of such financing and on the same pricing and other terms and conditions as such financing. As of the date of this prospectus, such participation right has expired.

DETERMINATION OF OFFERING PRICE

The selling stockholders will determine at what price they may sell the shares of common stock offered by this prospectus, and such sales may be made at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices.

PLAN OF DISTRIBUTION

Each selling stockholder of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the OTCQB Marketplace or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. A selling stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker dealer solicits purchasers;

- block trades in which the broker dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;

- purchases by a broker dealer as principal and resale by the broker dealer for its account;

- an exchange distribution in accordance with the rules of the applicable exchange;

- privately negotiated transactions;

- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;

- in transactions through broker dealers that agree with the selling stockholders to sell a specified number of such securities at a stipulated price per security;

- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;

- a combination of any such methods of sale; or

- any other method permitted pursuant to applicable law.

The selling stockholders may also sell securities under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker dealers engaged by the selling stockholders may arrange for other broker dealers to participate in sales. Broker dealers may receive commissions or discounts from the selling stockholders (or, if any broker dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

Table of Contents

In connection with the sale of the securities or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The selling stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be underwriters within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities. In no event shall any broker-dealer receive fees, commissions and markups which, in the aggregate, would exceed eight percent (8%).

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because selling stockholders may be deemed to be underwriters within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. The selling stockholders have advised us that there is no underwriter or coordinating broker acting in connection with the proposed sale of the resale securities by the selling stockholders.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the selling stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of securities of the common stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

Table of Contents

USE OF PROCEEDS

We will not receive proceeds from the sale of common stock under this prospectus. We will, however, receive approximately $2.1 million from the selling stockholders if they exercise their warrants in full on a cash basis, which we expect we would use primarily for working capital purposes. We may also use a portion of any proceeds we may receive from the exercise of such warrants to satisfy certain indebtedness to Inovio pursuant to the Asset Purchase Agreement, including our $1 million payment due to Inovio in December 2013. The warrant holders may exercise their warrants at any time in accordance with the terms thereof until their expiration, as further described under Description of Securities. If there is no effective registration statement registering the resale of the common stock underlying the warrants as of certain time periods (as provided in the warrants), the warrant holders may choose to exercise their warrants on a cashless exercise or net exercise basis. If they do so, we will not receive any proceeds from the exercise of the warrants. Because the warrant holders may exercise the warrants largely in their own discretion, if at all, we cannot plan on specific uses of proceeds beyond application of proceeds to the purposes herein described. We have agreed to bear the expenses (other than any underwriting discounts or commissions or agent s commissions) in connection with the registration of the common stock being offered hereby by the selling stockholders.

DESCRIPTION OF SECURITIES

Authorized Capital Stock

On March 1, 2011, we effected a 32 for one forward stock split of our common stock. As a result, our authorized capital has increased from 100,000,000 shares of common stock at $0.001 par value to 3,200,000,000 shares of common stock at $0.0001 par value. Following the effectiveness of the forward split, our outstanding capital stock increased from 2,140,000 shares of common stock to 68,480,000 shares of common stock. On February 28, 2011, the Company s former majority shareholders and directors, Ronald Dela Cruz and David Marby, entered into an agreement to sell certain of the shares held by them to Mr. Punit Dhillon, Dr. Avtar Dhillon and certain other purchasers in a private transaction. The Company was not a party to this agreement. As a condition of their acquisition of such shares from Mr. Dela Cruz and Mr. Marby, the purchasers of such shares required Mr. Dela Cruz and Mr. Marby to cancel and return to the Company the remaining shares of the Company s common stock held by them, for no consideration. On March 22, 2011, 17,280,000 shares of common stock held by Mr. Dela Cruz and Mr. Marby were returned to the Company for no consideration. The shares were not retired and are available for future issuance.

Capital Stock Issued and Outstanding

As of December 5, 2013, there were issued and outstanding:

- 171,038,526 shares of common stock, including 47,792,000 shares issued to investors in the September 2013 Public Offering; 28,800,000 shares issued to investors in the December 2012 Public Offering; 31,000,000 shares issued to investors in the March 2012 Public Offering; 4,000,000 share issued to investors in the June 2011 Private Placement; and 1,456,000 shares issued as part of units to three subscribers in an offshore transaction pursuant to Regulation S promulgated under the Securities Act (the March 2011 Private Placement);

- Options to purchase 4,978,956 shares of common stock at exercise prices ranging from $0.18 to $0.42 per share, issued to employees, directors, and consultants under the 2011 Plan;

- Warrants to purchase 1,456,000 shares of common stock at a price of $1.00 per share, issued as part of units issued in the March 2011 Private Placement;

- Series A Warrants to purchase 4,240,000 shares at an exercise price of $1.20 per share issued to two investors, two placement agents and two designees of a placement agent in connection with the June 2011 Private Placement;

- Warrants to purchase 30,697,000 and 1,550,000 shares of common stock at an exercise price of $0.35 and $0.3125 per share, respectively, issued to the investors, and the placement agent designees and the financial advisor in connection with the March 2012 Public Offering;

- Warrants to purchase 1,000,000 and 3,000,000 shares of common stock with an exercise price of $1.20 and $1.00 per share issued to Inovio on September 28, 2011 and March 24, 2012, respectively;

Table of Contents

- Warrants to purchase 9,728,974 and 1,440,000 shares of common stock at an exercise price of $0.26 and $0.3125 per share, respectively, issued to the investors, and the placement agent designees and the financial advisor in connection with the December 2012 Public Offering; and

- Warrants to purchase 23,896,000 and 2,389,600 shares of common stock at an exercise price of $0.35 and $0.3125 per share, respectively, issued to investors, and the placement agent designees and the financial advisor in connection with the September 2013 Public Offering.

Description of Common Stock

We are authorized to issue 3,200,000,000 shares of common stock. The holders of our common stock are entitled to one vote per share on all matters submitted to a vote of the stockholders, including the election of directors. Generally, all matters to be voted on by stockholders must be approved by a majority of the votes entitled to be cast by all shares of common stock that are present in person or represented by proxy, subject to any voting rights granted to holders of any preferred stock that we may issue. Except as otherwise provided by law, and subject to any voting rights granted to holders of any preferred stock that we may issue, amendments to our articles of incorporation generally must be approved by a majority of the votes entitled to be cast by all outstanding shares of common stock. Our articles of incorporation do not provide for cumulative voting in the election of directors. Subject to any preferential rights of any outstanding series of preferred stock created by our Board of Directors from time to time, the holders of our common stock will be entitled to cash dividends as may be declared, if any, by our Board of Directors from funds available. Subject to any preferential rights of any outstanding series of preferred stock that we may issue, upon liquidation, dissolution or winding up of our company, the holders of our common stock will be entitled to receive pro rata all assets available for distribution to the holders.

Our common stock is traded on the OTCQB Marketplace under the symbol ONCS .

Description of Warrants

Warrants Issued in the March 2011 Private Placement

In March 2011, we sold 1,456,000 units to three investors pursuant to an exemption from registration under Regulation S under the Securities Act. Each unit consisted of one share of our common stock and one share purchase warrant entitling the holder to acquire one share of our common stock at an exercise price of $1.00 per share. We are not obligated to register any of the shares issued or issuable upon exercise of the warrants issued in such private placement.

The warrants issued in the March 2011 Private Placement have a term of five years. They provide for the adjustment of the exercise price and number of shares issuable upon exercise of the warrant in connection with a stock split or reverse stock split of the shares of our common stock, such that the number of shares issuable upon exercise of the warrant is adjusted in proportion to the change in the number of outstanding shares

of common stock as a result of the event. Upon a capital reorganization or reclassification, or merger of the Company with or into any other company, each warrant will confer the right to purchase the number of shares or other securities of the Company (or of the company resulting from such transaction) which the holder would have been entitled to if the warrant holder had been a stockholder at the time of such transaction.

Warrants Issued in the June 2011 Private Placement and Registered in this Registration Statement

On June 24, 2011, the two investors in the June 2011 Private Placement were each issued a Series A Warrant, a Series B Warrant and a Series C Warrant, with each such warrant exercisable for up to 2,000,000 shares of our common stock. The Series A Warrants have an exercise price of $1.20 per share and expire on June 24, 2016. The Series B Warrants and the Series C Warrants expired in February 2012 and are no longer outstanding. In addition, we issued warrants to purchase 144,000 shares of our common stock to Rodman & Renshaw, LLC or its designees and 96,000 shares of our common stock to Roth Capital Partners, LLC pursuant to the terms of a Placement Agent Agreement entered into in connection with the June 2011 Private Placement. The warrants are exercisable for $1.20 per share for five years following their issuance and their terms are otherwise similar to those of the Series A Warrants.

Table of Contents

The exercise of the Series A Warrants is subject to certain exercise limitations, such that a holder thereof may not exercise the Series A Warrants if such exercise results in the holder becoming the beneficial owner of more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to such exercise, provided that upon at least 61 days prior notice to us, the holder may increase or decrease such limitation up to a maximum of 9.99% of the number of shares of common stock outstanding.

The Series A Warrants provide for the adjustment of the exercise price and number of shares issuable upon exercise of the warrants under the following circumstances, as more fully set forth in the Series A Warrants:

Stock dividend or distribution; forward or reverse stock split of our common stock:	Number of shares issuable upon exercise of the Warrant is adjusted in proportion to the change in the number of outstanding shares of common stock as a result of the event.
Subdivision or combination of outstanding shares of common stock:	Exercise price is further adjusted to the lower of (a) the exercise price as adjusted and (b) the average of the volume weighted average price (VWAP) of the common stock for the five trading days immediately following the date on which the applicable subdivision or combination becomes effective.
Distribution of dividends, rights, warrants or other assets to all holders of common stock and excluding the Warrant:	The exercise price is adjusted by multiplying the then-effective exercise price by a fraction, of which the denominator would be the VWAP of the common stock as of such distribution and the numerator would be such VWAP less the then per share fair market value of the portion of the dividends or other assets so distributed applicable to one outstanding share of our common stock.

In addition, upon the reclassification, reorganization or recapitalization of our common stock, our merger or consolidation with or into another entity, the consummation of a stock purchase agreement whereby more than 50% of the outstanding shares of the common stock are acquired by another person or entity, or a sale or other disposition of substantially all of our assets, the holder of each of the Series A Warrants is entitled to receive the number of shares of our common stock or the common stock of our successor or acquirer that such holder would have been entitled to receive immediately prior to such transaction, and the exercise price for such shares shall be adjusted based on the amount of any alternate consideration receivable as a result of such transaction by a holder of the number of shares of common stock for which the warrant is exercisable immediately prior to such transaction. The holder of the warrant may also require us or any successor entity to purchase the warrant from the holder by paying to the holder an amount of cash equal to the Black-Scholes value of the remaining unexercised portion of the warrant on the date of the consummation of the transaction.

The Series A Warrants also contain adjustment price-based anti-dilution provisions, which are generally triggered upon our issuance of common stock at a lower effective price than the applicable warrant s exercise price (subject to a floor price of $0.50 per share). On March 28, 2012, the exercise price of the Series A Warrants reset to $0.50 upon the closing of the March 2012 Public Offering.

Warrants Issued in the March 2012 Public Offering

On March 28, 2012, we issued a warrant to purchase one share of common stock for each share of common stock purchased by the investors participating in the March 2012 Public Offering, or warrants to purchase 31,000,000 shares. Each warrant has an exercise price of $0.35 per

share and is subject to a five year term.

In addition, we issued warrants to purchase 1,085,000 shares of our common stock to Rodman & Renshaw, LLC or its designees and 465,000 shares of our common stock to Roth Capital Partners, LLC pursuant to the terms of a Placement Agent Agreement entered into in connection with the March 2012 Public Offering. The warrants have an exercise price of $0.3125 per share and are subject to a five year term. These warrants have terms similar to those issued to investors in the March 2012 Public Offering.

The exercise of the warrants is subject to certain exercise limitations, such that the holder may not exercise the warrants if such exercise results in the holder becoming the beneficial owner of more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to such exercise, provided that upon at least 61 days prior notice to us, the holder may increase or decrease such limitation up to a maximum of 9.99% of the number of shares of common stock outstanding.

Table of Contents

The warrants provide for the proportionate adjustment of the number of shares issuable upon exercise of the warrants in connection with stock dividends and splits provided that the aggregate exercise price of the warrant remains unchanged. In addition, if we grant, issue or sell any common stock equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of common stock (and not the holder of the warrant), then the warrant holder will be entitled to acquire, upon the terms applicable to such purchase rights, the aggregate purchase rights which the holder could have acquired if the holder had held the number of shares of common stock acquirable upon complete exercise of the warrant. If we declare or make any dividend or other distribution of our assets to holders of our common stock, the warrant holder shall be entitled to participate in the distribution to the same extent that the holder would have participated therein if the holder had held the number of shares of common stock acquirable upon complete exercise of the warrant. Other than as described above, the warrants do not contain anti-dilution provisions.

Upon the reclassification, reorganization or recapitalization of our common stock, our merger or consolidation with or into another entity, the consummation of a stock purchase agreement whereby more than 50% of the outstanding shares of the common stock are acquired by another person or entity, or a sale or other disposition of substantially all of our assets, the holder of each of the warrants is entitled to receive the number of shares of our common stock or the common stock of our successor or acquirer that such holder would have been entitled to receive immediately prior to such transaction, and the exercise price for such shares shall be adjusted based on the amount of any alternate consideration receivable as a result of such transaction by a holder of the number of shares of common stock for which the warrant is exercisable immediately prior to such transaction. The holder of the warrant may also require us or any successor entity to purchase the warrant from the holder by paying to the holder an amount of cash equal to the Black Scholes value of the remaining unexercised portion of the warrant on the date of the consummation of the transaction.

Warrants Issued in the December 2012 Public Offering

On December 17, 2012, we issued a warrant to purchase up to one half of a share of common stock for each share of common stock purchased by the investors participating in the December 2012 Public Offering, or warrants to purchase 14,400,000 shares. The warrants are exercisable for $0.26 per share and are subject to a four year term. In addition, pursuant to our placement agent agreement for the December 2012 Public Offering, we issued warrants to purchase (i) 720,000 shares of our common stock to our lead placement agent, Dawson James Securities, Inc. or its designees and (ii) 360,000 shares of our common stock to each of our financial advisors in this offering, Noble International Investments, Inc. and Burrill, LLC. The warrants are exercisable for $0.3125 per share, are subject to a five year term and their terms are otherwise similar to those issued to investors in the December 2012 Public Offering.

The exercise of the warrants is subject to certain exercise limitations, such that the holder may not exercise the warrants if such exercise results in the holder becoming the beneficial owner of more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to such exercise, provided that upon at least 61 days prior notice to us, the holder may increase or decrease such limitation up to a maximum of 9.99% of the number of shares of common stock outstanding.

The warrants provide for the adjustment of the exercise price and number of shares issuable upon exercise of the warrants in connection with stock dividends and splits, such that the number of shares issuable upon exercise of the warrant is adjusted in proportion to the change in the number of the number of shares outstanding and the aggregate exercise price of the warrant remains unchanged. In addition, if we grant, issue or sell any common stock equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of common stock (and not the holder of the warrant), then the warrant holder will be entitled to acquire, upon the terms applicable to such purchase rights, the aggregate purchase rights which the holder could have acquired if the holder had held the number of shares of common stock acquirable upon complete exercise of the warrant. If we declare or make any dividend or other distribution of our assets to holders of our common stock, the warrant holder shall be entitled to participate in the distribution to the same extent that the holder would have participated therein if the holder had held the number of shares of common stock acquirable upon complete exercise of the warrant. Other than as described

above, the warrants do not contain anti-dilution provisions.

Upon the reclassification, reorganization or recapitalization of our common stock, our merger or consolidation with or into another entity, the consummation of a stock purchase agreement whereby more than 50% of the outstanding shares of the common stock are acquired by another person or entity, or a sale or other disposition of substantially all of our assets, the holder of each of the warrants is entitled to receive the number of shares of our common stock or the common stock of our successor or acquirer that such holder would have been entitled to receive immediately prior to such transaction, and the exercise price for such shares shall be adjusted based on the amount of any alternate consideration receivable as a result of

Table of Contents

such transaction by a holder of the number of shares of common stock for which the warrant is exercisable immediately prior to such transaction. The holder of the warrant may also require us or any successor entity to purchase the warrant from the holder by paying to the holder an amount of cash equal to the Black Scholes value of the remaining unexercised portion of the warrant on the date of the consummation of the transaction.

Warrants Issued in the September 2013 Public Offering

On September 18, 2013, we issued a warrant to purchase up to one half of a share of common stock for each share of common stock purchased by the investors participating in the September 2013 Public Offering, or warrants to purchase 23,896,000 shares. The warrants are exercisable for $0.35 per share and are subject to a four year term. In addition, pursuant to our placement agent agreement for the September 2013 Public Offering, we issued warrants to purchase (i) 1,911,680 shares of our common stock to our lead placement agent, H.C. Wainwright & Co., LLC or its designees and (ii) 477,920 shares of our common stock to our financial advisor in this offering, Maxim Group LLC. The warrants are exercisable for $0.3125 per share, are subject to a five year term and their terms are otherwise similar to those issued to investors in the September 2013 Public Offering.

The exercise of the warrants is subject to certain exercise limitations, such that the holder may not exercise the warrants if such exercise results in the holder becoming the beneficial owner of more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to such exercise, provided that upon at least 61 days prior notice to us, the holder may increase or decrease such limitation up to a maximum of 9.99% of the number of shares of common stock outstanding.

The warrants provide for the adjustment of the exercise price and number of shares issuable upon exercise of the warrants in connection with stock dividends and splits, such that the number of shares issuable upon exercise of the warrant is adjusted in proportion to the change in the number of shares outstanding and the aggregate exercise price of the warrant remains unchanged. In addition, if we grant, issue or sell any common stock equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of common stock (and not the holder of the warrant), then the warrant holder will be entitled to acquire, upon the terms applicable to such purchase rights, the aggregate purchase rights which the holder could have acquired if the holder had held the number of shares of common stock acquirable upon complete exercise of the warrant. If we declare or make any dividend or other distribution of our assets to holders of our common stock, the warrant holder shall be entitled to participate in the distribution to the same extent that the holder would have participated therein if the holder had held the number of shares of common stock acquirable upon complete exercise of the warrant. Other than as described above, the warrants do not contain anti-dilution provisions.

Upon the reclassification, reorganization or recapitalization of our common stock, our merger or consolidation with or into another entity, the consummation of a stock purchase agreement whereby more than 50% of the outstanding shares of the common stock are acquired by another person or entity, or a sale or other disposition of substantially all of our assets, the holder of each of the warrants is entitled to receive the number of shares of our common stock or the common stock of our successor or acquirer that such holder would have been entitled to receive immediately prior to such transaction, and the exercise price for such shares shall be adjusted based on the amount of any alternate consideration receivable as a result of such transaction by a holder of the number of shares of common stock for which the warrant is exercisable immediately prior to such transaction. The holder of the warrant may also require us or any successor entity to purchase the warrant from the holder by paying to the holder an amount of cash equal to the Black Scholes value of the remaining unexercised portion of the warrant on the date of the consummation of the transaction.

Inovio Warrants

In September 2011, in consideration for an amendment to the Asset Purchase Agreement with Inovio, we issued to Inovio a warrant to purchase 1,000,000 shares of our common stock. The warrant is exercisable for $1.20 per share and is subject to a five year term from the date of issuance. The warrant also contains a mandatory exercise provision allowing us to request the exercise of the warrant in whole provided that our daily market price (as that term is defined in the warrant) is equal to or greater than $2.40 for 20 consecutive trading days.

In March 2012, in consideration for a second amendment to the Asset Purchase Agreement, we issued to Inovio a warrant to purchase 3,000,000 shares of our common stock at an exercise price of $1.00 per share. The warrant contains the same terms as the previous warrant issued to Inovio.

Table of Contents

The warrants issued to Inovio provide for the adjustment of the exercise price and number of shares issuable upon exercise of the warrants in connection with the payment of a dividend or distribution on common stock in shares of common stock or a stock split or reverse stock split of the shares of our common stock, such that the number of shares issuable upon exercise of the warrant is adjusted in proportion to the change in the number of outstanding shares of common stock as a result of the event. In addition, the exercise price and number of shares issuable upon exercise of the warrants is subject to adjustment upon the distribution or dividend to our common stockholders of cash, property, or warrants to purchase common stock.

Upon the acquisition by an individual or legal entity or group of more than one-half of the voting rights or equity interests in the Company; or the sale, conveyance, or other disposition of all or substantially all of the assets, property or business of the Company or the merger into or consolidation with any other corporation (other than a wholly owned subsidiary corporation) or effectuation of any transaction or series of related transactions where holders of the Company s voting securities prior to such transaction or series of transactions fail to continue to hold at least 50% of the voting power of the Company, the holder of the warrant has the right to receive, for each share of stock that would have been issuable upon exercise of the warrant immediately prior to the occurrence of such change of control, the number of shares of common stock of the successor or acquiring corporation that the holder would have received if the holder had exercised immediately prior to the change of control, and any additional consideration receivable as a result of such change of control by a holder of the number of shares of common stock for which the warrant is exercisable immediately prior to such change of control.

Liability and Indemnification of Directors and Officers

Nevada Revised Statutes provide us with the power to indemnify any of our directors and officers. The director or officer must have conducted himself/herself in good faith and reasonably believe that his/her conduct was in, or not opposed to, our best interests. In a criminal action, the director or officer must not have had reasonable cause to believe his/her conduct was unlawful.

Under applicable sections of the Nevada Revised Statutes, advances for expenses may be made by agreement if the director or officer affirms in writing that he/she believes he/she has met the standards and will personally repay the expenses if it is determined the officer or director did not meet the standards.

Our bylaws include an indemnification provision under which we must indemnify any of our directors or officers, or any of our former directors or officers, to the full extent permitted by law. If Section 2115 of the California Corporations Code is applicable to us, certain laws of California relating to the indemnification of directors, officer and others also will govern.

At present, there is no pending litigation or proceeding involving any of our directors or officers for which indemnification is sought, nor are we aware of any threatened litigation that is likely to result in claims for indemnification. We also maintain insurance policies that indemnify our directors and officers against various liabilities, including liabilities arising under the Securities Act, which may be incurred by any director or officer in his or her capacity as such.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been informed 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 a claim for

indemnification against such liabilities (other than payment by us for expenses incurred or paid by a director, officer or controlling person of ours in successful defense of any action, suit, or proceeding) is asserted by a director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction, the question of whether such indemnification by it is against public policy in the Securities Act and will be governed by the final adjudication of such issue.

Anti-Takeover Provisions of Nevada State Law

Some features of the Nevada Revised Statutes, which are further described below, may have the effect of deterring third parties from making takeover bids for control of us or may be used to hinder or delay a takeover bid. This would decrease the chance that our stockholders would realize a premium over market price for their shares of common stock as a result of a takeover bid.

Table of Contents

Acquisition of Controlling Interest

The Nevada Revised Statutes contain provisions governing acquisition of a controlling interest of a Nevada corporation. These provisions provide generally that any person or entity that acquires a certain percentage of the outstanding voting shares of a Nevada corporation may be denied voting rights with respect to the acquired shares, unless certain criteria are satisfied. Our Amended and Restated Bylaws provide that these provisions will not apply to us or to any existing or future stockholder or stockholders.

Combination with Interested Stockholder

The Nevada Revised Statutes contain provisions governing the combination of a Nevada corporation that has 200 or more stockholders of record with an interested stockholder. These provisions may have the effect of delaying or making it more difficult to affect a change in control of our company.

A corporation affected by these provisions may not engage in a combination within three years after the interested stockholder acquires his, her or its shares unless the combination or purchase is approved by the board of directors before the interested stockholder acquired such shares. Generally, if approval is not obtained, then after the expiration of the three-year period, the business combination may be consummated with the approval of the board of directors before the person became an interested stockholder or a majority of the voting power held by disinterested stockholders, or if the consideration to be received per share by disinterested stockholders is at least equal to the highest of:

- the highest price per share paid by the interested stockholder within the three years immediately preceding the date of the announcement of the combination or within three years immediately before, or in, the transaction in which he, she or it became an interested stockholder, whichever is higher;

- the market value per share on the date of announcement of the combination or the date the person became an interested stockholder, whichever is higher; or

- if higher for the holders of preferred stock, the highest liquidation value of the preferred stock, if any.

Generally, these provisions define an interested stockholder as a person who is the beneficial owner, directly or indirectly of 10% or more of the voting power of the outstanding voting shares of a corporation, and define combination to include any merger or consolidation with an interested stockholder, or any sale, lease, exchange, mortgage, pledge, transfer or other disposition, in one transaction or a series of transactions with an interested stockholder of assets of the corporation having:

- an aggregate market value equal to 5% or more of the aggregate market value of the assets of the corporation;

- an aggregate market value equal to 5% or more of the aggregate market value of all outstanding shares of the corporation; or

- representing 10% or more of the earning power or net income of the corporation.

Articles of Incorporation and Bylaws

There are no provisions in our articles of incorporation or our bylaws that would delay, defer or prevent a change in control of our company and that would operate only with respect to an extraordinary corporate transaction involving our company or any of our subsidiaries, such as merger, reorganization, tender offer, sale or transfer of substantially all of its assets, or liquidation.

Transfer Agent

The transfer agent for our common stock is Nevada Agency and Transfer Company. The transfer agent s address is 50 West Liberty Street, Suite 880, Reno, Nevada 89501.

Table of Contents

MARKET PRICE OF AND DIVIDENDS ON COMMON STOCK AND RELATED MATTERS

Trading Information

Our common stock has been quoted on OTCQB Marketplace under the symbol ONCS since March 2011. Prior to March 2011, our common stock traded on the OTCQB and the OTC Bulletin Board under the symbol NTVS. As soon as practicable, and assuming we satisfy all necessary initial listing requirements, we intend to apply to have our common stock listed for trading on a national securities exchange, although we cannot be certain that any application would be approved or that we will ever be able to satisfy the qualitative or quantitative listing requirements for our common stock to be listed on an exchange. We do not intend to apply for listing of the warrants registered in the registration statement of which this prospectus forms a part on any securities exchange, and we do not expect that those warrants will be quoted on the OTCQB.

The transfer agent for our common stock is Nevada Agency and Transfer Company at 50 West Liberty Street, Suite 880, Reno, Nevada 89501.

The following table sets forth the range of reported high and low closing bid quotations for our common stock for the fiscal quarters indicated as reported on the OTCQB. The quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not represent actual transactions.

	High	Low
Fiscal 2012		
First Quarter ended October 31, 2011	$ 1.00	$ 0.31
Second Quarter ended January 31, 2012	$ 0.81	$ 0.12
Third Quarter ended April 30, 2012	$ 1.00	$ 0.18
Fourth Quarter ended July 31, 2012	$ 0.30	$ 0.15
Fiscal 2013		
First Quarter ended October 31, 2012	$ 0.49	$ 0.18
Second Quarter ended January 31, 2013	$ 0.41	$ 0.20
Third Quarter ended April 30, 2013	$ 0.29	$ 0.18
Fourth Quarter ended July 31, 2013	$ 0.34	$ 0.23
Fiscal 2014		
First Quarter ended October 31, 2013	$ 0.36	$ 0.24
Second Quarter ending January 31, 2014 (through December 5, 2013)	$ 0.33	$ 0.26

Our common stock is thinly traded and any reported sale prices may not be a true market-based valuation of our common stock. On December 5, 2013, the closing bid price of our common stock, as reported on the OTCQB, was $0.30.

As of December 5, 2013, there were 38 holders of record of our common stock, not including stockholders whose shares are held in street name.

Dividends

We have never declared or paid any cash dividends or distributions on our capital stock. We currently intend to retain our future earnings, if any, to support operations and to finance expansion and therefore we do not anticipate paying any cash dividends on our common stock in the foreseeable future.

Securities Authorized for Issuance under Equity Compensation Plans

In May 2011, our Board of Directors adopted the 2011 Plan. The 2011 Plan was approved by our stockholders in March 2012 and originally authorized the Board of Directors to grant equity awards to employees, directors, and consultants for up to 5,200,000 shares of our common stock. On April 15, 2013, our stockholders approved an amendment to the 2011 Plan to authorize the issuance of an additional 3,800,000 shares of our common stock under the 2011 Plan, increasing the total number of shares reserved for issuance under the 2011 Plan to 9,000,000 shares. The 2011 Plan provides for the issuance of a variety of forms of awards, including stock options, stock appreciation rights, restricted stock and restricted stock units. The following table provides information as of July 31, 2013, with respect to our equity compensation plans:

Table of Contents

Equity Compensation Plan Information

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	5,150,000	$ 0.23	3,083,500
Equity compensation plans not approved by security holders			
Total	5,150,000	$ 0.23	3,083,500

MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes contained elsewhere in this prospectus. In addition to historical information, the following discussion contains forward-looking statements based upon current expectations that are subject to risks and uncertainties. Actual results may differ substantially from those referred to herein due to a number of factors, including but not limited to risks described in the section entitled Risk Factors and elsewhere in this prospectus.

Company Overview

We were incorporated under the laws of the State of Nevada on February 8, 2008 under the name Netventory Solutions Inc. to pursue the business of inventory management solutions. Effective March 1, 2011, we effected a 32 for one forward stock split of our common stock and completed a merger with our subsidiary, OncoSec Medical Incorporated, a Nevada corporation which was incorporated solely to effect the change in our name to OncoSec Medical Incorporated .

Recent Events September 2013 Public Offering

On September 18, 2013, we closed a registered public offering and issued an aggregate of 47,792,000 shares of our common stock and warrants to purchase an aggregate of 23,896,000 shares of common stock for gross proceeds of approximately $11.95 million (the September 2013 Public Offering). The warrants have an exercise price of $0.35 per share, are exercisable immediately upon issuance and have a term of exercise equal to four years from the date of issuance of the warrants. After deducting for fees and expenses, the aggregate net proceeds to us from the sale of the common stock and the warrants in the September 2013 Public Offering were approximately $11.1 million.

In connection with the offering, we paid placement agent fees consisting of (i) a cash fee equal to 6% of the gross proceeds of the offering, as well as a non-accountable expense allowance equal to 1% of the gross proceeds and (ii) warrants to purchase up to an aggregate of 5% of the aggregate number of shares of common stock sold in the offering, or 2,389,600 shares of our common stock (the September 2013 Placement

Agent Warrants). The September 2013 Placement Agent Warrants have substantially the same terms as the warrants issued to the purchasers in the offering, except that such warrants have an exercise price of $0.3125 and expire on September 13, 2018. We intend to use the net proceeds from the September 2013 Public Offering for general corporate purposes, including clinical trial expenses and research and development expenses. As described below, we are obligated to make a final payment of $1 million to Inovio on December 31, 2013.

Asset Purchase Agreement

We have acquired certain assets pursuant to our Asset Purchase Agreement with Inovio Pharmaceuticals, Inc. (Inovio), dated March 14, 2011 (as amended, the Asset Purchase Agreement). The acquired assets relate to certain non-DNA vaccine technology and intellectual property relating to selective tumor ablation technologies, which we now refer to as the OncoSec Medical System (OMS), a therapy which uses an electroporation device to facilitate delivery of chemotherapy agents, or nucleic acids encoding cytokines, into tumors and/or surrounding tissue for the treatment and diagnosis of various cancers. The acquired assets included various assets related to the OMS technology.

Table of Contents

We did not assume any of the liabilities of Inovio except liabilities under the assigned contracts and assigned intellectual property arising after the closing date of the Asset Purchase Agreement. We agreed to pay Inovio $3,000,000 in scheduled payments beginning on the closing date as well as certain royalties in the event we commercialize our OMS technology. We have entered into amendments to the Asset Purchase Agreement with Inovio in September 2011 (the First Amendment) and in March 2012 (the Second Amendment) to modify the terms of our payment obligations (among other modifications). We recently made a payment of $1 million to Inovio in May 2013 and we are required to make a final payment to Inovio of $1 million on December 31, 2013. In consideration for the First Amendment we issued to Inovio a warrant to purchase 1,000,000 shares of common stock with an exercise price of $1.20 per share. In consideration for the Second Amendment, we issued to Inovio a warrant to purchase 3,000,000 shares of our common stock with an exercise price of $1.00 per share. Each of the warrants is subject to a five year term. Each of the warrants also contains a mandatory exercise provision allowing us to request the exercise of the warrant in whole provided that our daily market price (as defined in the warrant) is equal to or greater than $2.40 for twenty consecutive trading days. We completed an evaluation of the warrants issued to Inovio and determined the warrants should be classified as equity within our consolidated balance sheet.

We are also party to a cross-license agreement with Inovio, which we entered into concurrently with the closing of our asset acquisition. This agreement provides for the exclusive license to Inovio of rights related to certain OMS technology patents in the field of gene or nucleic acids, outside of those encoding cytokines, delivered by electroporation and for the non-exclusive cross-license by Inovio to us of rights related to certain non-OMS technology patents in the OMS field in exchange for specified sublicensing and other licensing fees and royalties.

We are focused on designing, developing and commercializing innovative and proprietary medical approaches for the treatment of solid tumors where currently approved therapies are inadequate based on their therapeutic benefit or side-effect profile. Our therapies are based on the use of electroporation to deliver either an approved chemotherapeutic agent (NeoPulse), or a DNA plasmid construct that encodes for a cytokine (ImmunoPulse) to treat solid tumors. NeoPulse and ImmunoPulse specifically target destruction of cancerous cells and not healthy normal tissues. Our goal is to improve the lives of people suffering from the life-altering effects of cancer through the development of our novel treatment approaches. We have initiated three Phase II clinical trials for the use of our therapies to treat metastatic melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma.

University of South Florida License

On August 24, 2012, we secured an exclusive license for specific patented technology from the University of South Florida Research Foundation relating to the delivery of gene-based therapeutics via intratumoral and intramuscular electroporation. This patent is directly supports our clinical development focus in solid tumor applications and specifically metastatic melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma using our ImmunoPulse therapy, and extends patent protection for the ImmunoPulse technology to the year 2024.

Facility Lease

On May 31, 2013, we entered into a thirty-eight month lease agreement for office space to serve as our corporate headquarters. Our lease commenced on July 1, 2013 and is subject to an initial base monthly rent of approximately $8,000. The lease calls for annual increases to the base rent of three percent.

Recent Equity Financings

September 2013 Public Offering

On September 18, 2013, we closed the September 2013 Public Offering, which is described above under the heading Recent Events September 2013 Public Offering .

December 2012 Public Offering

On December 17, 2012, we completed a registered public offering of an aggregate of 28,800,000 shares of our common stock and warrants to purchase an aggregate of 14,400,000 shares of common stock for gross proceeds of $7.2 million (the December 2012 Public Offering). After deducting for fees and expenses, the aggregate net proceeds to us from the sale of the common stock and the warrants in the December 2012 Public Offering were approximately $6.7 million. In connection with the offering, we paid placement agent fees consisting of (i) a cash fee equal to 6% of the gross proceeds of the offering, as well as a non-accountable expense allowance equal to 1% of the gross proceeds and (ii) warrants to purchase up to an aggregate of 5% of the aggregate number of shares of common stock sold in the offering, or 1,440,000 shares of our common stock (the December 2012 Placement Agent Warrants). The December 2012 Placement Agent Warrants have substantially the same terms as the warrants issued to the purchasers in the offering, except that such warrants have an exercise price of $0.3125 and expire on December 11, 2017.

Table of Contents

March 2012 Public Offering

In March 2012, we completed a registered public offering of an aggregate of 31,000,000 shares of common stock and warrants to purchase an aggregate of 31,000,000 shares of common stock at an aggregate purchase price of $7.75 million (the March 2012 Public Offering). After deducting for fees and expenses, the aggregate net proceeds to us from the March 2012 Public Offering were approximately $7.2 million. The warrants issued in the offering have an exercise price of $0.35 per share, are exercisable immediately upon issuance and have a term of exercise equal to five years from the date of issuance of the warrants. In connection with the offering, we paid placement agent fees consisting of (i) a cash fee equal to 6% of the gross proceeds of the offering, as well as a non-accountable expense allowance equal to 1% of the gross proceeds of the offering and (ii) warrants to purchase up to an aggregate of 5% of the aggregate number of shares of common stock sold in the offering, or 1,550,000 shares of common stock (the March 2012 Placement Agent Warrants). The March 2012 Placement Agent Warrants have substantially the same terms as the warrants issued to the purchasers in the offering, except that such warrants have an exercise price of $0.3125 and expire on March 23, 2017.

We completed an evaluation of all of the warrants issued in connection with the December 2012 Public Offering and the March 2012 Public Offering and determined the warrants should be classified as equity within the consolidated balance sheet.

Critical Accounting Policies

Accounting for Long-Lived Assets / Intangible Assets

We assess the impairment of long-lived assets, consisting of property and equipment, and finite-lived intangible assets, whenever events or circumstances indicate that the carry value may not be recoverable. Examples of such circumstances include: (1) loss of legal ownership or title to an asset; (2) significant changes in our strategic business objectives and utilization of the assets; and (3) the impact of significant negative industry or economic trends.

Recoverability of assets to be held and used in operations is measured by a comparison of the carrying amount of an asset to the future net cash flows expected to be generated by the assets. The factors used to evaluate the future net cash flows, while reasonable, require a high degree of judgment and the results could vary if the actual results are materially different than the forecasts. In addition, we base useful lives and amortization or depreciation expense on our subjective estimate of the period that the assets will generate revenue or otherwise be used by us. If such assets are considered impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less selling costs.

We also periodically review the lives assigned to our intangible assets to ensure that our initial estimates do not exceed any revised estimated periods from which we expect to realize cash flows from the technologies. If a change were to occur in any of the above-mentioned factors or estimates, the likelihood of a material change in our reported results would increase.

Derivative Liabilities

In conjunction with the June 2011 Private Placement, we issued warrants that are accounted for as derivative liabilities. These derivative liabilities were determined to be ineligible for equity classification due to certain price protection and anti-dilution provisions.

These derivative liabilities were initially recorded at their estimated fair value on the date of issuance of the common stock and warrants, and are subsequently adjusted to reflect the estimated fair value at each period end, with any decrease or increase in the estimated fair value being recorded as other income or expense. The fair value of these liabilities is estimated using option pricing models that are based on the individual characteristics of the common stock, the derivative liabilities on the valuation date, probabilities related to future financings, as well as assumptions for volatility, remaining expected life, and risk-free interest rate. The option pricing models of our derivative liabilities are estimates and are sensitive to changes to inputs and assumptions used in the option pricing models.

Table of Contents

Share-Based Compensation

We grant equity-based awards under our share-based compensation plan. We estimate the fair value of share-based payment awards using the Black-Scholes option valuation model. This fair value is then amortized over the requisite service periods of the awards. The Black-Scholes option valuation model requires the input of subjective assumptions, including price volatility of the underlying stock, risk-free interest rate, dividend yield, and expected life of the option. Share-based compensation expense is based on awards ultimately expected to vest, and therefore is reduced by expected forfeitures. Changes in assumptions used under the Black-Scholes option valuation model could materially affect our net loss and net loss per share.

Results of Operations

Comparison of Fiscal Years Ended July 31, 2013 and 2012

The audited consolidated financial data for the years ended July 31, 2013 and July 31, 2012 is presented in the following table and the results of these two periods are used in the discussion thereafter.

	July 31, 2013 ($)	July 31, 2012 ($)	Increase/ (Decrease) ($)	Increase/ (Decrease) %
Revenue				
Operating expenses				
Research and development	3,159,209	2,368,481	790,728	33
General and administrative	3,905,763	3,158,693	747,070	24
Loss from operations	(7,064,972)	(5,527,174)	1,537,798	28
Other income (expense)				
Interest expense non-cash	(83,215)	(266,567)	(183,352)	(69)
Loss on extinguishment of debt		(761,492)	(761,492)	(100)
Adjustments to fair value of derivative liabilities		4,192,781	(4,192,781)	(100)
Net loss before income taxes	(7,148,187)	(2,362,452)	(4,785,735)	**
Income tax provision	2,000	2,400	(400)	(17)
Net loss	(7,150,187)	(2,364,852)	(4,785,335)	**

** Percentage increase/(decrease) is greater than 100%.

Research and Development Expenses

The $791,000 increase in research and development expenses for the year ended July 31, 2013 as compared to the year ended July 31, 2012 was mainly the result of increased clinical trial expenses of $723,000. We expect research and development to account for a significant portion of our total expenses in the future as we continue to focus on designing and developing our therapies.

General and Administrative

The $747,000 increase in general and administrative expenses for the year ended July 31, 2013 as compared to the year ended July 31, 2012 was primarily the result of increased corporate communications costs of $160,000 consisting primarily of investor relation services, contract labor costs of $40,000, rental expense of $72,000, salaries and wage expense of $67,000, information technology costs of $53,000, conference registration fees of $58,000, share based compensation expense of $168,000 as well as other general corporate matters and increased travel and associated costs of $29,000.

Other Income (Expense)

The $3,082,000 decrease in other income for the year ended July 31, 2013 as compared to the year ended July 31, 2012 was primarily due to the recording of other income of $4,193,000 as a result of the adjustment to fair value of the derivative liabilities as of April 30, 2012. In connection with the June 2011 Private Placement, we issued warrants to purchase 240,000 shares of our common stock to the co-placement agents and warrants to purchase 12,000,000 shares of our common stock to the investors in the private placement. As more fully described in Note 7 to our consolidated financial statements, certain warrants issued in connection with the June 2011 Private Placement were determined to be derivative liabilities as a result of the anti-dilution provisions contained in the warrant agreements. All of these warrants ceased to be classified as derivative liabilities as of March 28, 2012.

Table of Contents

Liquidity and Capital Resources

Working Capital

Our working capital as of July 31, 2013 and 2012 is summarized as follows:

	At July 31, 2013 ($)	At July 31, 2012 ($)
Current assets	5,169,687	5,493,056
Current liabilities	1,770,604	2,023,156
Working capital (deficiency)	3,399,083	3,469,900

Current Assets

The decrease in our current assets was primarily due to a decrease in cash from $5,142,000 as of July 31, 2012, to $4,970,000 as of July 31, 2013, as a result cash used in operations during the year ended July 31, 2013.

Current Liabilities

Current liabilities as of July 31, 2013 decreased to $1,771,000 from $2,023,000 as of July 31, 2012. This decrease was primarily due to the $500,000 payment made on September 24, 2012, in accordance with the Asset Purchase Agreement as more fully discussed in Note 6 to our consolidated financial statements.

Cash Flow

Cash Flow Used in Operating Activities

Cash used in operating activities for the year ended July 31, 2013 was $5,533,000, as compared to $4,219,000 for the year ended July 31, 2012. This increase was related to increased costs of operations, such as salary expense and associated costs, clinical trial costs, legal fees and professional fees, primarily.

Cash Flow Used in Investing Activities

Cash used in investing activities for the year ended July 31, 2013 was $115,000, as compared to $55,000 for the year ended July 31, 2012 and related to the acquisition of property and equipment for our new office location.

Cash Flow Provided by Financing Activities

Cash provided by financing activities was $5,476,000 for the year ended July 31, 2013 and primarily related to cash received from the December 2012 Public Offering partially offset by the payment of offering costs and scheduled payments to Inovio in connection with the Asset Purchase Agreement. Cash provided by financing activities was $6,958,000 for the year ended July 31, 2012, and was primarily related to proceeds we received from the March 2012 Public Offering.

Equity Financings Since March 2011

In March 2011 we closed a private placement of 1,456,000 units at a purchase price of $0.75 per unit for gross proceeds of $1,092,000 (the March 2011 Private Placement). Each unit consisted of one share of our common stock and one share purchase warrant entitling the holder to acquire one share of our common stock at a price of $1.00 per share for a period of five years from the closing of the March 2011 Private Placement. The warrants were exercisable as of March 18, 2011 and any unexercised warrants will expire on March 18, 2016. We completed an evaluation of the warrants issued with this private placement and determined the warrants should be classified as equity within our consolidated balance sheet. We are not obligated to register any of the shares issued or issuable upon exercise of the warrants issued in the March 2011 Private Placement.

Table of Contents

On June 24, 2011, we sold in a private placement an aggregate of 4,000,000 shares of our common stock and three series of warrants to purchase an aggregate of 12,000,000 shares of our common stock at a per unit purchase price of $0.75 per unit, for gross proceeds of $3.0 million (the June 2011 Private Placement). We also issued warrants to purchase 240,000 shares of our common stock to the co-placement agents in the offering. After deducting for fees and expenses, the aggregate net cash proceeds from the June 2011 Private Placement were approximately $2.79 million.

Pursuant to the terms of the securities purchase agreement that we entered into with the purchasers in the June 2011 Private Placement, each purchaser was issued a Series A Warrant, a Series B Warrant and a Series C Warrant, each to purchase up to a number of shares of our common stock equal to 100% of the shares issued to such purchaser pursuant to the securities purchase agreement. The Series A Warrants had an initial exercise price of $1.20 per share, are exercisable immediately upon issuance and have a term of five years. On February 21, 2012, the Series B and Series C Warrants expired unexercised. On March 28, 2012, the exercise price of the Series A Warrants reset to $0.50 upon the closing of the March 2012 Public Offering.

On March 28, 2012, in the March 2012 Public Offering, we sold an aggregate of 31,000,000 units, each consisting of one share of common stock and a warrant to purchase one share of common stock, at a purchase price of $0.25 per unit. The warrants have an exercise price of $0.35 per share, are exercisable immediately upon issuance and have a term of exercise equal to five years from the date of issuance. We paid fees and expenses of $542,500 and issued warrants to purchase 1,550,000 shares of our common stock on terms substantially similar to the purchaser warrants to the placement agent and a financial advisor in the March 2012 Public Offering. After deducting for fees and expenses, our aggregate net proceeds from the offering were approximately $7.2 million.

On December 17, 2012, in the December 2012 Public Offering, we sold an aggregate of 28,800,000 shares of our common stock and warrants to purchase an aggregate of 14,400,000 shares of common stock for an aggregate purchase price of $7.2 million. The warrants have an exercise price of $0.26 per share, are exercisable immediately upon issuance and have a term of exercise equal to four years from the date of issuance. We paid fees and expenses of $504,000 and issued warrants to purchase 1,440,000 shares of our common stock on terms substantially similar to the purchaser warrants to the placement agent and our financial advisors in the December 2012 Public Offering. After deducting for fees and expenses, the aggregate net proceeds from the offering were approximately $6.7 million.

On September 18, 2013, we closed the September 2013 Public Offering, in which we sold an aggregate of 47,792,000 shares of our common stock plus warrants to purchase an aggregate of 23,896,000 shares of common stock for a purchase price of $0.25 per share, for gross proceeds of approximately $11.95 million. The warrants have an exercise price of $0.35 per share, are exercisable immediately upon issuance and have a term of exercise equal to four years from the date of issuance. We paid placement agent fees consisting of (i) $836,000 in cash fees and expenses and (ii) issued warrants to purchase 2,390,000 shares of our common stock on terms substantially similar to the purchaser warrants in the September 2013 Public Offering. After deducting for fees and expenses, the aggregate net proceeds from the September 2013 Public Offering were approximately $11.1 million.

Cash Requirements

Our primary objectives for the next twelve-month period are to develop and pursue the commercialization of our planned products and to identify additional products for acquisition and development. We continuously search for industry experts to expand our management team and better position our company. In addition, we expect to pursue raising sufficient capital to fund our operations and to acquire and develop additional assets and technology consistent with our business objectives.

We estimate our operating expenses and working capital requirements for the next 12 months to be approximately as follows:

Expense		Amount
Product development	$	4,900,000
Employee compensation		2,500,000
General and administration		1,300,000
Professional services fees		400,000
Total	$	9,100,000

Table of Contents

As of July 31, 2013, we had cash and cash equivalents of approximately $4,970,000. On September 18, 2013, we closed a public offering of our equity securities whereby we issued an aggregate of 47,792,000 shares of our common stock plus warrants to purchase an aggregate of 23,896,000 shares of our common stock, at a purchase price of $0.25 per share, which resulted in net proceeds to us of approximately $11.1 million. We expect these funds to be sufficient to allow us to continue to operate our business for at least the next twelve months.

If the investors in the June 2011 Private Placement, the March 2012 Public Offering, December 2012 Public Offering and the September 2013 Public Offering choose to exercise their remaining outstanding warrants in full on a cash basis, we would receive approximately $2 million, $11 million, $4 million and $8 million, respectively. However, the warrant holders may choose not to exercise any of the warrants they hold, may choose to net exercise their warrants as provided in such warrants under certain limited circumstances, or may choose to exercise only a portion of the warrants issued. The exercise prices of the outstanding warrants issued with each such offering currently exceed the current market price of our common stock on the OTCQB Marketplace. As a result, we may never receive proceeds from the exercise of such warrants.

Since inception we have funded our operations primarily through equity and debt financings and we expect to continue to do so in the future. If we obtain additional financing by issuing equity securities, our existing stockholders ownership will be diluted. Obtaining commercial loans, assuming those loans would be available, will increase our liabilities and future cash commitments. We may be unable to maintain operations at a level sufficient for investors to obtain a return on their investments in our common stock. Further, we may continue to be unprofitable.

Off-Balance Sheet Arrangements

We have no significant off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to stockholders.

DESCRIPTION OF BUSINESS

Overview

We are an emerging drug-medical device and therapeutic company focused on designing, developing and commercializing innovative and proprietary medical approaches for the treatment of solid tumors that have unmet medical needs or where currently approved therapies are inadequate based on their efficacy or side-effects. Our company was incorporated under the laws of Nevada on February 8, 2008 as Netventory Solutions Inc. Initially, we provided online inventory services to small and medium sized companies. In March 2011, we changed our name to OncoSec Medical Incorporated and acquired from Inovio certain assets related to the use of drug-medical device combination products for the treatment of various cancers. With this acquisition, we have abandoned our efforts in the online inventory services industry and are focusing our efforts in the biomedical industry.

Our Strategy

The assets we acquired include intellectual property relating to certain delivery technologies, which we refer to as the OncoSec Medical System (OMS), a therapeutic approach which is based on the use of an electroporation delivery device in combination with an approved chemotherapeutic drug and a DNA-based cytokine to treat solid tumors. These two different approaches represent unique therapeutic modalities, ImmunoPulse and NeoPulse. Our ImmunoPulse approach is based on the use of electroporation to enhance the local delivery of DNA plasmids which, upon uptake into cells, direct the production of immunostimulatory cytokines to generate a local, regional and systemic immune response for the treatment of various cutaneous cancers. NeoPulse utilizes our electroporation technologies for the local delivery of the chemotherapeutic drug bleomycin to treat solid tumors. OMS consists of an electrical pulse generator console and various disposable applicators specific to the individual tumor size, type and location and is designed to increase the permeability of cancer cell membranes and, as a result, increases the intracellular delivery of selected therapeutic agents. Using either ImmunoPulse, a DNA-based immunotherapy or NeoPulse, a therapy to treat solid tumors, our mission is to enable people with cancer to live longer with a better quality of life than otherwise possible or available with existing therapies.

Table of Contents

Cancer is a disease of uncontrolled cell growth. The primary front line treatment of solid tumors involves surgical resection and/or radiation to eliminate or debulk tumor growth prior to initiating systemic therapy with chemotherapeutic agents. In the case of invasive surgical procedures, surgeons will often remove or resect an area outside of the obvious tumor mass to ensure that they have excised all of the cancerous tissue because of the difficulty in determining the border, or margin, between healthy and diseased tissue. This treatment can result in the loss of function and appearance of the surrounding tissues, significantly reducing the patient s quality of life. Although there have been recent advances in non-surgical forms of tumor ablation, such as cryoablation, stereotactic, microwave and high frequency radio ablation therapy, we believe they fail to fully satisfy the clinical need to preserve normal healthy tissue. Given the desire for improved outcomes in the surgical resection of solid tumors, we believe that there can be significant demand for our NeoPulse technology from patients, dermatologists and surgical oncologists.

The NeoPulse approach has been developed up to Phase III clinical trials in the United States for the treatment of recurrent head and neck cancer and Phase I/II for the treatment of recurrent breast cancer. NeoPulse has potential application in a wide range of solid tumors, including basal cell carcinoma, squamous cell carcinoma, melanoma, breast, prostate, and pancreatic cancers. In addition, Phase IV pre-marketing studies to support the commercialization of NeoPulse in Europe have also been performed for the treatment of primary and recurrent head and neck cancers and cutaneous skin cancers. We are actively pursuing opportunities primarily focused in Europe, Asia and North America to partner NeoPulse for further clinical development and commercialization.

When detected early and still confined to a single location, cancer may be cured by surgery or radiation and potentially, by promising new technologies such as NeoPulse. However, neither surgery nor radiation can cure cancer that has spread throughout the body. Although chemotherapy can sometimes effectively treat cancer that has spread throughout the body, a number of non-cancerous cells, such as bone marrow cells, are also highly susceptible to chemotherapy. As a result, chemotherapy often has fairly significant side effects. In addition, it is common to see cancer return after apparently successful treatment by each of these means. We hope that ImmunoPulse can offer a solution for systemic diseases with an improvement in safety and quality of life for patients over conventional systemic treatments such as chemotherapy.

Immunotherapy, a process which uses the patient s own immune system to treat cancer, may have advantages over surgery, radiation, and chemotherapy. Many cancers appear to have developed the ability to hide from the immune system. A treatment that can augment the immune response against tumor cells by making the cancer more visible to the immune system would likely represent a significant improvement in cancer therapy. Immune-enhancing proteins such as interleukin-2, or IL-2, and interferon-alpha, or IFN- α, have shown encouraging results. However, these agents often require frequent doses that may result in severe side effects.

Two recent drugs for metastatic melanoma were approved in 2011, both on the basis of increased survival. Yervoy ®, a monoclonal antibody marketed by Bristol-Myers Squibb Co., stops the suppression of T-cells that can seek out and destroy melanoma cells. Zelboraf ®, a B-Raf inhibitor marketed by Roche and Daiichi Sankyo, interrupts a key process in melanoma growth in patients with a particular melanoma mutation. Both drugs are associated with significant side effects, and neither is considered a cure for melanoma.

In May 2013, two new drugs for metastatic melanoma were approved. Tafinlar® and Mekinist are single-agent oral treatments for the treatment of unresectable metastatic melanoma. Like Zelboraf®, both of these new agents interrupt a key process in melanoma growth by inhibiting the MAP Kinase signaling pathway. Also, like Zelboraf, these agents can cause significant side effects and long-term use may lead to drug resistance by tumor cells.

Our current ImmunoPulse clinical-stage approach consists of directly injecting solid tumors with a DNA plasmid which, upon uptake into cells, direct the production of the encoded immunostimulatory cytokine to generate a loco-regional immune response against the tumor, which potentially may result in a systemic immune response. The ease of manufacture, convenience, and ability to repeat administration may offer advantages over current modalities of therapy. In addition, cancer therapies using non-viral DNA delivery may offer an added margin of safety compared with viral-based delivery, as no viral particles or other potentially infectious agents are contained in the formulation. A Phase I clinical trial using our ImmunoPulse approach has been completed and three Phase II clinical trials focused on melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma have been initiated.

Our business model is based on a development strategy that leverages previous in-depth clinical experiences, previous approvals for the electroporation-based devices and late stage clinical studies in the United States and Europe. We may seek regulatory approvals to initiate specific studies in target markets to collect safety, clinical, reimbursement, and pharmacoeconomic data as part of our development strategy. Our clinical development strategy includes completing the necessary additional clinical trials in accordance with FDA guidelines for cutaneous cancers including select rare cancers that

Table of Contents

have limited, adverse or no therapeutic alternatives. Our strategy also includes expanding the applications of our technologies through strategic collaborations or evaluation of other opportunities such as in-licensing and strategic acquisitions. We may collaborate with major pharmaceutical and biotechnology companies and government agencies, providing us access to complementary technologies or greater resources. These business activities are intended to provide us with mutually beneficial opportunities to expand or advance our product pipeline and serve significant unmet medical needs. We may license our intellectual property to other companies to leverage our technologies for applications that may not be appropriate for our independent product development.

Asset Acquisition

On March 14, 2011, we entered into the Asset Purchase Agreement with Inovio to acquire certain assets from Inovio related to certain non-DNA vaccine technology and intellectual property relating to selective electrochemical tumor ablation (that we refer to as the OMS). The asset purchase was completed on March 24, 2011. On September 28, 2011 and March 24, 2012, we entered into amendments to the Asset Purchase Agreement to amend certain of the payment terms. We acquired various assets from Inovio related to the OMS technology.

We did not assume any of the liabilities of Inovio except liabilities under the assigned contracts and assigned intellectual property arising after the closing date of the Asset Purchase Agreement. We agreed to pay Inovio $3,000,000 in scheduled payments beginning on the closing date as well as certain royalties in the event we commercialize our OMS technology. We have entered into amendments to the Asset Purchase Agreement with Inovio in September 2011 (the First Amendment) and in March 2012 (the Second Amendment) to modify the terms of our payment obligations (among other modifications). We recently made a payment of $1 million to Inovio in May 2013 and we are required to make a final payment to Inovio of $1 million on December 31, 2013. In consideration for the First Amendment, we issued to Inovio a warrant to purchase 1,000,000 shares of common stock with an exercise price of $1.20 per share. In consideration for the Second Amendment, we issued to Inovio a warrant to purchase 3,000,000 shares of our common stock with an exercise price of $1.00 per share. Each of the warrants is subject to a five year term. Each of the warrants also contains a mandatory exercise provision allowing us to request the exercise of the warrant in whole provided that our daily market price (as defined in the warrant) is equal to or greater than $2.40 for twenty consecutive trading days. We completed an evaluation of the warrants issued to Inovio and determined the warrants should be classified as equity within our consolidated balance sheet.

We are also party to a cross-license agreement with Inovio, which we entered into concurrently with the closing of our asset acquisition. This agreement provides for the exclusive license to Inovio of rights related to certain OMS technology patents in the field of gene or nucleic acids, outside of those encoding cytokines, delivered by electroporation and for the non-exclusive cross-license by Inovio to us of rights related to certain non-OMS technology patents in the OMS field in exchange for specified sublicensing and other licensing fees and royalties.

University of South Florida License

On August 24, 2012, we secured an exclusive license for specific patented technology from the University of South Florida Research Foundation relating to the delivery of gene-based therapeutics via intratumoral and intramuscular electroporation. This patent directly supports our clinical development focus in solid tumor applications and specifically metastatic melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma using our ImmunoPulse therapy, and extends patent protection for the ImmunoPulse technology to the year 2024.

The OncoSec Medical System

Many drugs and DNA-based therapeutics must enter the target cell through its membrane in order to perform their intended function. However, the effectiveness of these medicines is limited since gaining entry into target cells through the outer membrane can be a significant challenge. In the 1970s, it was discovered that the brief application of high-intensity, pulsed electric fields to the cell resulted in a temporary and reversible increase in the permeability of the cell membrane. As a consequence, it was also demonstrated that there was a subsequent increase in the ability of both small and large molecules to move between the cell exterior and interior via the newly formed membrane pores.

The transient, reversible nature of the electrical permeabilization of cell membranes and the resulting increase in intracellular delivery of therapeutic agents is the underlying basis of our OMS therapeutic approach. OMS consists of an electrical pulse generator console and various disposable applicators specific to the individual tumor size, type and location. While the extent of membrane permeabilization depends on various electrical, physical, chemical, and biological parameters, research with OMS has demonstrated an increase of cellular uptake of chemical molecules from 1,000-8,000 fold above baseline. Once inside of the cell, the membrane permeability decreased thereby trapping the molecules within the cell and allowing them to perform their function. The enhanced delivery of these agents may result in the ability to not only improve cytotoxicity and therapeutic value but also to lower the required doses and thereby providing a potentially safer treatment.

Table of Contents

DNA Delivery With Electroporation ImmunoPulse

The greatest obstacles to making conventional immunotherapy and DNA-based immunotherapies a reality has been the limited data supporting safe, efficient, and economical delivery and expression of plasmid-DNA constructs into the target cells. We are leveraging off the past history and experience of certain managers and advisors in developing the methods and devices that optimize the use of electroporation for the efficient and effective delivery of DNA-based therapeutics. The use of OMS in this approach has been validated from multiple clinical studies assessing DNA-based immunotherapies against cancers. Together with our partners and collaborators, we plan to be the leader in establishing electroporation-delivered DNA immunotherapies. We believe that electroporation should become the method of choice for plasmid-DNA delivery into cells in many clinical applications.

The immunotherapy approach of our OMS therapy uses an electroporation system that is calibrated and designed to create optimal conditions to deliver plasmid DNA encoding immunotherapeutic cytokines into tumor cells that in turn promote anti-cancer responses. The cytokine-encoding plasmid is first injected with a syringe/needle into the selected tumor. Using a remote control, the pulse generator is switched on and electrical pulses are generated and delivered through an attached electrical cord into the injected tissue through an electrode-needle array on the applicator. When DNA injection is followed by electroporation of the target tissue, transfection is significantly greater with resultant gene expression generally enhanced from 100 to 1000-fold. This increase makes many DNA-based candidates potentially feasible without unduly compromising safety or cost.

A Phase I clinical trial in metastatic melanoma has been completed using ImmunoPulse to deliver plasmid-DNA encoding for the IL-12 cytokine. The study was designed to assess both the adaptive and innate immunity responses from the targeted delivery of the IL-12 into melanoma tumor cells. Published data have suggested that gene transfer utilizing in vivo DNA electroporation in metastatic melanoma showed that it was safe, effective, reproducible, and titratable. The findings also demonstrated not only regression of treated melanoma skin lesions, but also regression of distant untreated lesions, suggesting a systemic immune response to the localized treatment. These results are significant and thus we are now planning to further develop of OMS for the delivery of plasmid-DNA encoding for the IL-12 cytokine in a Phase II clinical trial that has been initiated.

Drug Delivery With Electroporation NeoPulse

The chemotherapeutic approach of our NeoPulse platform was formerly described as Selective Electrochemical Tumor Ablation (SECTA). NeoPulse utilizes electroporation technologies for the local delivery of the chemotherapeutic drug bleomycin to treat solid tumors. The approach has demonstrated safety and efficacy in a wide range of solid tumors including, basal cell, squamous cell, melanoma, breast, prostate, and pancreatic cancers. NeoPulse has been developed up to Phase III clinical trials in the United States for the treatment of recurrent head and neck cancer and in Phase I/II for the treatment of recurrent breast cancer. In addition, Phase IV pre-marketing studies to support the commercialization of the OMS system in Europe were also performed for the treatment of primary and recurrent head and neck cancers and cutaneous skin cancers. The previous sponsor of these studies (Inovio Pharmaceuticals, Inc.) elected not to conclude the clinical testing but rather monetize certain SECTA assets in order to pursue a more focused strategy for development of DNA vaccines.

Clinical Program

We initiated three Phase II clinical trials to assess the cancer-destroying and tissue-sparing properties of the ImmunoPulse technology in patients with melanoma**,** Merkel cell carcinoma and cutaneous T-cell lymphoma during calendar year 2012. Our lead ImmunoPulse candidate for these trials is a DNA plasmid coding for IL-12 that is delivered using our OMS electroporation device. While the DNA IL-12 immunotherapy is administered locally, results from preclinical and Phase I clinical trials indicated that the therapy was safe and without toxic side effects. Although Phase I trials are designed to study only safety and tolerability, our Phase I trial suggested that our ImmunoPulse produced both a local and systemic effect against cancerous cells. All three Phase II clinical trials were initially physician-sponsored open label, multi-center trials. As of the date of this prospectus, all three physician sponsored IND applications have been transferred to the Company.

Table of Contents

Phase II Melanoma Trial (OMS-I100)

Our melanoma trial, entitled Phase II trial of intratumoral pIL-12 electroporation in advanced stage cutaneous and in transit malignant melanoma, is a single dose trial treating approximately 25 patients. The primary endpoint is objective response rate (local and distant) at six months. Secondary trial endpoints include time to objective response (complete and partial responses), duration of distant response and overall survival. We are building on positive Phase I dose escalation trial results in 24 patients with metastatic melanoma treated with pIL-12 in combination with electroporation. That study established safety and tolerability and suggested a systemic objective response in more than half of the subjects; 15% of patients showed 100% clearance of distant, non-treated tumors. Based on historical data, less than 0.25% of patients would have been expected to see regression in their untreated tumors.

Phase II Merkel Cell Carcinoma Trial (OMS-I110)

Merkel cell carcinoma is a rare but lethal skin cancer affecting about 1,500 people each year with 33% mortality rate. Current outcomes to chemotherapy treatment have demonstrated short-lived responses with no clear impact on overall survival. Our clinical trial, entitled A Phase II study of intratumoral injection of interleukin-12 plasmid and in vivo electroporation in patients with Merkel cell carcinoma, is a single dose, open label trial in 15 patients. The study s endpoints are IL-12 gene expression in tumor tissue at three to four weeks post-treatment and secondary endpoints will evaluate objective response rates (both local and distant) at six months post-treatment, time to relapse or progression and overall survival. This study will evaluate the safety and tolerability of DNA IL-12 as a treatment for Merkel cell carcinoma and aims to further validate the findings from the Phase I dose escalation trial carried out in 24 metastatic melanoma patients.

Phase II Cutaneous T-Cell Lymphoma (OMS-I120)

Cutaneous T-cell lymphoma (CTCL) is a rare disease affecting approximately 3,000 people each year with current therapies requiring life-long management and treatment. Today s treatment methods delivered either locally or systemically all result in systemic toxicities. Cytokine therapies have shown some therapeutic benefit, however, the requirement for high dose systemic concentrations results in unwanted toxicities and eventual resistance to the therapy. In contrast, our ImmunoPulse treatment uses locally delivered low dose plasmid-DNA coding for IL-12, which induces a local immune response designed to target and destroy cancerous cells, which may potentially result in a systemic response against distant untreated tumors. A previous Phase I clinical trial in 24 melanoma patients demonstrated a strong safety profile for this mode of treatment. The planned clinical trial, entitled Phase II trial of intratumoral IL-12 plasmid electroporation in cutaneous lymphoma, is an open label, multi-center study and is expected to enroll 27 patients. The trial s primary endpoint is to assess the objective response rate (both local and distant) at six months post-treatment, with safety and progression-free survival as secondary endpoint measures. ImmunoPulse is a potentially new treatment being evaluated for patients suffering from CTCL, who currently have few options to treat this chronic life-altering disease.

Scientific Advisory Panel

We have consulted with senior and respected oncology researchers to provide counsel as part of our scientific advisory panel for our ImmunoPulse clinical program, each of whom is employed elsewhere on a full-time basis. As a result, they can only spend a limited amount of time on our affairs. We expect to access scientific and medical experts in academia, as needed, to support our scientific advisory panel. The scientific advisory panel assists us on issues related to potential product applications, product development and clinical testing.

Commercialization

We plan to continue our clinical development strategy for the ImmunoPulse program with Phase II and subsequent pivotal clinical trials focused on cutaneous cancers including select rare cancers that have limited, adverse or no therapeutic alternatives. We expect our current studies to validate data from previous Phase I clinical experience, which will be used to further develop the Company s development strategy for this program.

Our business model for the NeoPulse program is based on a partnering and commercialization strategy that leverages previous in-depth clinical experiences, and late stage clinical studies in the United States (Phase III) and Europe (Phase IV). Our near term plan will be to identify and engage potential partner(s) who are established industry leaders in the field of surgical oncology, or who are seeking to expand their portfolio into this space with the purpose of partnering the NeoPulse asset in select geographic regions, such as Europe and Asia. Once a partner is engaged, we may plan to seek regulatory approvals to initiate specific studies in target markets to collect clinical, reimbursement, and pharmacoeconomic data in order to advance a joint commercialization strategy.

Table of Contents

Competition

We are in a highly competitive industry. We are in competition with traditional and alternative therapies for the indications we are targeting, as well as pharmaceutical and biotechnology companies, hospitals, research organizations, individual scientists and nonprofit organizations engaged in the development of drugs and other therapies for these indications. Our competitors may succeed, and many have already succeeded, in developing competing products, obtaining FDA approval for products or gaining patient and physician acceptance of products before us for the same markets and indications that we are targeting. Many of these companies, and large pharmaceutical companies in particular, have greater research and development, regulatory, manufacturing, marketing, financial and managerial resources and experience than we have and many of these companies may have products and product candidates that are in a more advanced stage of development than our product candidates. If we are not first to market for a particular indication, it may be more difficult for us or our collaborators to effectively enter markets unless we can demonstrate our products are clearly superior to existing therapies (see also Intellectual Property below).

Examples of competitive therapies include the following:

•Surgical Resection. In most cases, the primary treatment for localized and operable tumors or lesions is surgical resection alone or in combination with other modalities such as radiation therapy. Given the ability to cut an appropriate margin around the tumor in order to avoid recurrence from microscopic disease populating the periphery of the tumor mass makes surgery highly effective for early stage cancers. Recent advances in robotic surgical technology have provided more minimally invasive surgical options. However, accessibility of a tumor at times prevents the use of surgery or limits the margin that can be removed especially at sites such as the tongue where the loss of tissue results in the loss of critical function such as speech. The drawback to resecting tissue is potential disfigurement or debilitating effects on organ function. Surgery also requires additional cost in the form of hospitalization and post-operative care.

•Radiation Therapy. Radiation therapy is the use of high-energy rays generated by an external machine or by radioactive materials placed directly into or near the tumor and used to damage and stop growth of malignant cells, which are more sensitive to the effects of radiation. Radiation is often used in combination with surgery and chemotherapy. In cases where a tumor is inoperable or unresponsive to chemotherapy, radiation is often used palliatively to limit the complications of disease progression. Radiation therapy has a number of significant side effects, in that it damages healthy cells surrounding the target area and takes several weeks to administer. It may also be costly due to the number of procedures and cost of administration.

•Chemotherapy. Post-surgery or in cases where surgery is contraindicated, chemotherapy is often used to treat systemic disease and may frequently be combined with radiation therapy. Typically it is used under the following circumstances:

•When cancer is disseminated requiring treatment of systemic or metastatic disease;

•Where the prognosis for local regional disease is poor due to the likelihood of disease progression;

•Where surgery is contraindicated, e.g. certain liver or pancreatic carcinoma or as a result of the patient s overall health condition; and

•For palliation, to achieve tumor shrinkage to ameliorate tumor symptoms or complications.

The cytotoxicity of many existing anti-cancer drugs is well proven, but with many undesirable proven side effects including immunosuppression alopecia (loss of hair), nausea, vomiting, and in some cases drug resistance. Surgery and radiation cannot be used where treatment poses a risk to nearby nerves, blood vessels, or vital organs. All of these practices have limited efficacy in treating cancers of certain organs, such as the pancreas.

•Alternative treatments. Competitive therapies also include alternative treatments, such as radio frequency ablation, photodynamic therapy, cryoablation, brachytherapy and biologic or immunotherapy:

•Radio Frequency Ablation (RFA). This modality uses radio frequency energy to heat tissue to a high enough temperature to cause ablation or cell death. An RFA ablation probe is placed directly into the target tissue. An array of several small, curved electrodes is deployed from the end of the probe. Once sufficient temperatures are reached, the heat kills the target tissue within a few minutes. This treatment has been

Table of Contents

proven efficacious in treating some solid tumors but suffers from not being tumor specific by destroying healthy as well as malignant tissue.

•Photodynamic Therapy. Photodynamic therapy (PDT) uses intravenous administration of a light-activated drug that accumulates in malignant cells. A non-thermal laser is used to activate the drug, producing free radical oxygen molecules that destroy the cancer. PDT has low risk of damage to adjacent normal tissue, the ability to retreat, and can be used concurrently with other treatment modalities. A major side effect of PDT is patient photosensitivity that can last for as long as six to eight weeks following treatment. Other side effects include nausea and vomiting. This method is limited by the shallow depth of penetration of the laser light which makes it more applicable to surface lesions on the skin or esophagus.

•Cryoablation. Cryoablation is a technique being used to treat lesions in liver, kidney, prostate, and breast cancer. This method uses liquid nitrogen filled probes inserted into the tumor mass with image guided surgery to freeze cancer cells. Necrosis (cell death) occurs and the dead cells are naturally sloughed off into the body. Cryoablation has been most commonly adopted for use in treating prostate carcinoma where surgery can often lead to impotence. The technology is claimed to limit nerve damage in the prostate allowing for the retention of bladder and sexual function. Therefore, it may afford advantages over surgery and brachytherapy (see below).

•Brachytherapy. Brachytherapy involves the local implantation of radioactive seeds into or near a tumor mass. It has been most widely used in prostate and breast carcinoma in situ. The seeds decay over time resulting in the local destruction of malignant cells. The difficulty with brachytherapy, in addition to the concomitant destruction of nascent healthy tissue, is the investment and training required to administer the therapy. Recent reports also suggest that the therapy may not produce durable responses (i.e. long term cures). Consequently, brachytherapy does not appear to be growing in acceptance in the marketplace.

•Immunotherapy. This therapeutic approach stimulates the patient s own immune system to attack malignant tumor cells, which have managed to circumvent the body s natural immune processes that would normally recognize and destroy these cells before they are able to form growing cancerous tumors. Several methods have been employed to evoke this immune response, including monoclonal antibodies and autologous cell-based vaccines, as well as viral and non-viral targeted delivery of immunotherapeutic agents.

Yervoy® is a monoclonal antibody that acts to block the CTLA-4 receptor (an immune checkpoint receptor) on T-cells. In the presence of CTLA-4 receptor it is believed tumors are able suppress the immune system from recognizing cancerous cells, however, blockade of this receptor with Yervoy® (an anti-CTLA-4 antibody) appears to allow the immune system to generate an antitumor T-cell response. Yervoy® was the first approved immunotherapy in melanoma, and current research is evaluating the use of other anti-checkpoint monoclonal antibodies. Despite these therapies showing benefit to some patients by extending life beyond traditional therapeutic options, safety and tolerance to these drugs, as well as ease of administration of the therapies, may be a deterrent for some patients. As a result, emerging therapies continue to be developed to improve upon the safety, efficacy and ease-of-use problems currently encountered by immunotherapies.

Like Provenge®, a product developed and marketed by Dendreon Corporation, many emerging therapies continue to employ an autologous cell-based mode of delivery, which involves the harvesting of a patients own cells, growing them in a lab, incubating with a vaccine or immune stimulating agent, and re-administering the resulting product to the patient. This autologous cell-based approach has shown safety and efficacy, however, the significant cost and time involved in preparing this therapeutic treatment for each individual patient has been unattractive for many patients and clinicians.

Viral vectors, such as adenoviruses and oncolytic viruses, have also been used to deliver immunotherapeutic payloads to fight against cancerous cells, either systemically or through direct injection into the tumor. Clinical trials for this therapeutic delivery method are on-going with no approved therapies yet to be available in the clinic, however, questions still remain about efficacy of viral vectors as a delivery method, since the patient may mobilize an immune reaction against the virus itself resulting in neutralization of the virus and clearance from the body before an effectual response is elicited. Since viral vectors are occasionally created from pathogenic viruses, involving a deletion of a part of the viral genome critical for viral replication, safety has also been a concern to avoid production of new virions.

Table of Contents

Other non-viral vector methods, including liposome-based delivery systems, are also currently being developed and employed in on-going clinical trials. The impact of all these emerging cancer immunotherapies will ultimately be determined by their ability to improve upon the safety, efficacy, utility and cost of currently available therapies.

•Vaccination. The use of vaccination has long held interest as another potential modality that could prove beneficial in treating and limiting systemic disease. The challenge has been that many tumors do not display antigens unique to the tumor cell that the immune system can use to specifically target for selective destruction of the malignant tissue. Even though tumors over-express normal cellular products that the immune system ignores, due to a process called tolerization, the immune system is educated not to recognize self antigens early in development. As a result of the lack of immune system detection, it has proven difficult to use conventional vaccination strategies to break or overcome tolerance and generate immunity against tumor cells.

•Targeted Small Molecule Therapy. Mutations that drive signaling pathways critical to tumor growth and survival have recently been identified. One such mutation of the mitogen activated protein (MAP) kinase pathway has been shown to be important in the proliferation approximately 50% of all cutaneous melanomas. The introduction of BRAF inhibitors, that block the BRAF V600E mutation, has greatly improved the short term prospects of some patients with these tumors, but the tumors tend to become resistant to therapy with time by activating alternative signaling pathways.

Research and Development Expenditures

Prior to our asset purchase from Inovio in March 2011, we did not engage in any research and development activities. We incurred $3,159,209 and $2,368,481 in research and development expenses during our fiscal years ended July 31, 2013 (Fiscal 2013) and July 31, 2012 (Fiscal 2012), respectively. We expect research and development to account for a significant portion of our total expenses in the future as we continue to focus on designing and developing our therapies. Our expenditures will be primarily related to the advancement of three Phase II clinical trials to assess the ImmunoPulse technology in patients with melanoma, Merkel cell carcinoma and cutaneous T-cell lymphoma. Expenditures related to these studies began during calendar year 2011 and we expect to ramp up expenditures based on enrollment in the trials and subsequent analysis of patient data from the separate studies.

Employees

Concurrent with the asset acquisition, we assembled a senior management team with many years of experience and success in biotech/pharma operations, business and commercial development and capital markets. In addition, we have assembled a clinical and regulatory team that has had many years of experience in developing and advancing novel therapeutic approaches through clinical testing and regulatory approvals. As of December 5, 2013, we have a total of twelve full-time employees.

We expect to hire additional staff and to engage consultants in regulatory, compliance, investor and public relations, and general administration as necessary. We also expect to engage experts in healthcare and in general business to advise us in various capacities.

Intellectual Property

Our success and ability to compete depends upon our intellectual property. We have acquired and have been issued 27 U.S. patents and have two U.S. patent applications pending. We expect to file additional patent applications. We have a total of 18 issued patents and patent applications in other jurisdictions. The bulk of our patents, including fundamental patents directed toward our proprietary technology, expire between 2014 and 2027. In addition, we have licensed intellectual property rights to use certain electroporation technology and intellectual property for delivering DNA-based cytokines as an immunotherapy.

Table of Contents

Government Regulation

United States

In the United States, our product candidates are subject to extensive regulation by the Food and Drug Administration (the FDA). Federal and state statutes and regulations, many of which are administered by the FDA, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of pharmaceutical products. Failure to comply with applicable FDA or other requirements may subject a company to a variety of administrative or judicial sanctions, such as the FDA s refusal to approve pending applications, a clinical hold, warning letters, recall or seizure of products, partial or total suspension of production, withdrawal of the product from the market, injunctions, fines, civil penalties or criminal prosecution.

FDA approval is required before any new unapproved drug or dosage form, including a new use of a previously approved drug, can be marketed in the United States. The process required by the FDA before a drug may be marketed in the United States generally involves, among other things:

•completion of pre-clinical testing and formulation studies in compliance with the FDA s good laboratory practice regulations;

•submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may begin in the United States;

•performance of adequate human clinical trials in accordance with good clinical practices to establish the safety and efficacy of the proposed drug product for each intended use; and

•submission to the FDA of a new drug application (NDA) which the FDA must review and approve.

The pre-clinical and clinical testing and approval process requires substantial time, effort and financial resources, and the receipt and timing of approval, if any, is highly uncertain. The results of pre-clinical tests, together with certain manufacturing information, analytical data and a proposed clinical trial protocol and other information, are submitted as part of an IND to the FDA. Once an IND is in effect, the protocol for each clinical trial to be conducted under the IND must be submitted to the FDA, which may or may not allow the trial to proceed. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development.

Clinical trials involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with good clinical practice requirements. For purposes of an NDA submission and approval, human clinical trials are typically conducted in the following sequential phases, which may overlap or be combined:

•*Phase I*: The drug is initially introduced into healthy human subjects or patients and tested for safety, dose tolerance, absorption, metabolism, distribution and excretion and, if possible, to gain an early indication of its effectiveness.

•*Phase II*: The drug is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted indications and to determine dose tolerance and optimal dosage. Multiple Phase II clinical trials may be conducted.

•*Phase III*: The drug is administered in large patient populations to obtain additional evidence of clinical efficacy and safety in an expanded patient population at multiple, geographically-dispersed clinical trial sites and to establish the overall risk-benefit relationship of the drug.

•*Phase IV*: In some cases, the FDA may condition approval of an NDA for a product candidate on the sponsor s agreement to conduct additional clinical trials to further assess the drug s safety and effectiveness after NDA approval.

The results of product development, pre-clinical studies and clinical trials are submitted to the FDA as part of an NDA requesting approval to market the product. NDAs must also contain extensive information relating to the product s pharmacology, chemistry, manufacture, controls and proposed labeling, among other things.

Once the submission has been accepted for filing, the FDA begins an in-depth substantive review. Pursuant to the FDA s performance goals, NDA reviews are to be completed within ten months, subject to extensions by the FDA. Before approving an NDA, the FDA often inspects the facility or facilities where the product is manufactured and will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with good manufacturing practices. Additionally, the FDA will typically inspect one or more clinical sites to assure compliance with good clinical practices before approving an NDA. If the FDA determines that the NDA is not acceptable, then the FDA may outline the deficiencies in the NDA and often will request additional information or additional clinical trials. Notwithstanding the submission of any requested additional testing or information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

Table of Contents

Even if regulatory approval of a product candidate is obtained, such approval will usually entail limitations on the indicated uses for which the product may be marketed. Additionally, the FDA may require post-approval testing, such as Phase IV studies, or surveillance programs to monitor the effect of approved products, and the FDA has the power to prevent or limit further marketing of a product based on the results of these post-marketing programs.

After FDA approval, a product will be subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to drug/device listing, recordkeeping, periodic reporting, product sampling and distribution, manufacturing practices, labeling, advertising and promotion, and reporting of adverse experiences with the product. The FDA may withdraw its approval of a product if compliance with regulatory requirements and manufacturing standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things: restrictions on the marketing or manufacturing of the product; complete withdrawal of the product from the market or product recalls; fines, warning letters or holds on post-approval clinical trials; or injunctions or the imposition of civil or criminal penalties.

International Regulation

If we pursue research and/or commercialization of our product candidates in countries other than the United States, then we would need to obtain the necessary approvals by the regulatory authorities of such foreign countries comparable to the FDA before we could commence clinical trials or marketing of our product candidates in those countries, and we would be subject to a variety of foreign regulations regarding safety and efficacy and governing, among other things, clinical trials and commercial sales and distribution of our products. The approval process and requirements vary by country and can involve additional product testing and additional review periods, and the time may be longer or shorter than that required to obtain FDA approval.

Other Regulatory Requirements and Environmental Matters

We are or may become subject to various laws and regulations regarding laboratory practices and the experimental use of animals, as well as environmental laws and regulations governing, among other things, any use and disposal by us of hazardous or potentially hazardous substances in connection with our research. In each of these areas, as above, the FDA and other government agencies have broad regulatory and enforcement powers, including, among other things, the ability to levy fines and civil penalties, suspend or delay issuance of approvals, seize or recall products, and withdraw approvals, any one or more of which could have a material adverse effect on us. Additionally, if we are able to successfully obtain approvals for and commercialize our product candidates, then we may become subject to various federal, state and local laws targeting fraud, abuse, privacy and security in the healthcare industry.

Properties

We do not own any real property. In May 2011, we entered into a one-year operating lease agreement with a base annual rent of $42,000 for office space for our headquarters in San Diego, California. The lease expired on May 30, 2012. On June 1, 2012, we entered into an amendment to the lease agreement to extend the lease term for a period of seven months commencing on June 1, 2012. The amendment increased the base monthly rent to approximately $10,000. On May 31, 2013, we entered into a thirty-eight month lease agreement for office space for our current

headquarters in San Diego, California that commenced on July 1, 2013, with an initial base monthly rent of approximately $8,000. The lease calls for annual increases to the base rent of three percent. We believe our current facilities are adequate for our immediate and near-term needs. Additional space may be required as we expand our activities. We do not currently foresee any significant difficulties in obtaining any required additional facilities.

Table of Contents

DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Set forth below is certain information regarding our directors and executive officers:

Name	Position	Age	Director / Officer Since
Avtar Dhillon, M.D. (2)(3)(4)(5)	Chairman and Director	52	March 10, 2011
James DeMesa, M.D. (1)(2)(3)	Director	55	February 3, 2011
Anthony Maida, III, Ph.D (1)(3)(4)	Director	61	June 21, 2011
Punit Dhillon	President, Chief Executive Officer and Director	33	March 10, 2011
Veronica Vallejo	Chief Financial Officer	40	March 10, 2011

(1) Member of Audit Committee

(2) Member of Compensation Committee

(3) Member of Nomination and Corporate Governance Committee

(4) Member of Clinical and Regulatory Affairs Committee

(5) Member of Financing Committee

Business Experience

The following is a brief account of the education and business experience of our directors and executive officers during at least the past five years, indicating their principal occupation during the period, and the name and principal business of the organization by which they were employed.

Avtar Dhillon, M.D., Chairman and Director

Dr. Dhillon has served as our Chairman, since March 2011. Previously, Dr Dhillon was the President and Chief Executive Officer of Inovio Pharmaceuticals, Inc. (formerly Inovio Biomedical Corporation) (NYSE Euronext: INO) from October 2001 to June 2009, as President and Chairman of Inovio from June 2009 until October 2009, as Executive Chairman until August 2011, and as Chairman from September 2011. During his tenure at Inovio, Dr. Dhillon led the successfully turnaround of the company through a restructuring, acquisition of technology from several European and North American companies, and a merger with VGX Pharmaceuticals to develop a vertically integrated DNA vaccine development company with one of the strongest development pipelines in the industry. Dr. Dhillon led multiple successful financings for Inovio and concluded several licensing deals that included global giants, Merck and Wyeth (now Pfizer). Prior to joining Inovio, Dr. Dhillon was vice president of MDS Capital Corp. (now Lumira Capital Corp.), one of North America s leading healthcare venture capital organizations. In July 1989, Dr. Dhillon started a medical clinic and subsequently practiced family medicine for over 12 years. Dr. Dhillon has been instrumental in successfully turning around struggling companies and influential as an active member in the biotech community. From March 1997 to July 1998, Dr. Dhillon was a consultant to Cardiome Pharma Corp. (NASDAQ: CRME), where he led a turnaround based on three pivotal

financings, establishing a clinical development strategy, and procuring a new management team. In his role as a founder and board member of companies, Dr. Dhillon has been involved in several early stage healthcare focused companies listed on the USA or Canadian stock exchanges, which have successfully matured through advances in their development pipeline and subsequent M&A transactions. Most recently, he was a founding board member (May 2003) of Protox Therapeutics, Inc. (TSX-V: SHS) (now Sophiris Bio Inc.), a publicly traded specialty pharmaceutical company. Dr. Dhillon maintained his board position until the execution of a financing of up to $35 million with Warburg Pincus in November 2010. Dr. Dhillon currently sits on the Board of Directors of BC Advantage Funds, a Venture Capital Corporation in British Columbia, and since March 2012 has been the Chairman of Stevia First Corp. (OTCQB: STVF), an agricultural biotechnology company engaged in the cultivation and harvest of stevia leaf and the development of stevia products. Since May 2011, Dr. Dhillon has also served as a Director and was appointed Chairman in April 2013 of Arch Therapeutics, Inc. (OTCBB: ARTH), a medical device company offering an innovative therapeutic approach to stasis and barrier applications. Dr. Dhillon plays a key role on our Board of Directors because of his extensive experience with pharmaceutical and biotech companies, including based on his tenure as President and CEO of Inovio where he was responsible for developing and executing on the clinical programs that provide the extensive clinical database supporting the Company s current clinical development plan and partnering efforts for treating solid tumors.

James M. DeMesa, M.D., Director

Dr. DeMesa has been a practicing physician and has served as a senior executive with several international pharmaceutical and biotech companies in the areas of corporate management, regulatory affairs, and pre-clinical and clinical pharmaceutical and medical device product development. In addition to OncoSec, Dr. DeMesa is currently on the Board of Directors of Induce Biologics and Stem Cell Therapeutics. In August 2008, Dr. DeMesa retired from his role as President, Chief Executive Officer and a director of Migenix Inc., a public biotechnology company focused on infectious and neurodegenerative diseases. From 1997 to 2001, he was President, Chief Executive Officer and a director of GenSci Regeneration Sciences Inc., a public biotech company involved in regenerative medicine (now part of Integra LifeSciences). From 1992 to 1997, he was Vice President, Medical and Regulatory Affairs at Biodynamics International, Inc. (now part of Regeneration Technologies), and from 1989 to 1992 was Vice President, Medical and Regulatory Affairs of Bentley Pharmaceuticals (now part of Teva Pharmaceuticals). Dr. DeMesa is a co-founder of CommGeniX, a medical communications company, and MedXcel, a medical education company. Dr. DeMesa attended the University of South Florida where he received his B.A. (Chemistry), M.D. and M.B.A. degrees and did his medical residency at the University of North Carolina. He is the author of two books and speaks regularly to companies and organizations throughout North America. Dr. DeMesa provides the Board with extensive experience with pharmaceutical and biotechnology companies.

Table of Contents

Anthony Maida, III, Ph.D, MA, MBA, Director

On June 21, 2011, Dr. Maida joined our Board of Directors. Dr. Maida has served as a director on the Board of Directors of Spectrum Pharmaceuticals, Inc. since December 2003 and currently serves as the Chair of its Audit Committee and a member of its Compensation Committee, Placement Committee, Nomination and Corporate Governance Committee and Product Acquisition Committee. He is currently Chief Operating Officer at Northwest Biotherapeutics, Inc., a company focused on the development of therapeutic DC cell-based vaccines to treat patients with cancer. Dr. Maida has been the acting Chairman of Dendri Therapeutics, Inc., a startup company focused on the clinical development of therapeutic vaccines for patients with cancer, since 2003 and as Principal of Anthony Maida Consulting International since 1999, providing consulting services to large and small biopharmaceutical firms in the clinical development of oncology products and product acquisitions and to venture capital firms evaluating life science investment opportunities. Recently Dr. Maida was Vice President of Clinical Research and General Manager, Oncology, world-wide for PharmaNet, Inc. He served as the President and Chief Executive Officer of Replicon NeuroTherapeutics, Inc., a biopharmaceutical company focused on the therapy of patients with tumors (both primary and metastatic) of the central nervous system, where he successfully raised financing from both venture capital and strategic investors and was responsible for all financial and operational aspects of the company, from June 2001 to July 2003. From 1999 to 2001, he held positions as Interim Chief Executive Officer for Trellis Bioscience, Inc., a privately held biotechnology company that addresses high clinical stage failure rates in pharmaceutical development, and President of CancerVax Corporation, a biotechnology company dedicated to the treatment of cancer. From 1992 until 1999, Dr. Maida served as President and CEO of Jenner Biotherapies, Inc., a biopharmaceutical company. From 1980 to 1992, he held senior management positions with various companies including Vice President Finance and Chief Financial Officer of Data Plan, Inc., a wholly owned subsidiary of Lockheed Corporation. Dr. Maida serves or has served as a consultant and technical analyst for several investment firms, including CMX Capital, LLC, Sagamore Bioventures, Roaring Fork Capital, North Sound Capital, The Bonnie J. Addario Lung Cancer Foundation and Pediatric BioScience, Inc. Additionally, he has been retained by Abraxis BioScience, Inc., Northwest Biotherapeutics, Inc., Takeda Chemical Industries, Ltd. (Osaka, Japan), and Toucan Capital to conduct corporate and technical due diligence on investment opportunities. Dr. Maida formerly served as a member of the board of directors of Sirion Therapeutics, Inc., a privately held ophthalmic- focused company, and GlycoMetrix, Inc., a startup company focused on the development of assays to identify carbohydrates that can indicate cancer. He is a speaker at industry conferences and is a member of the American Society of Clinical Oncology, the American Association for Cancer Research, the Society of Neuro-Oncology and the International Society for Biological Therapy of Cancer. Dr. Maida received a B.A. in History from Santa Clara University in 1975, a B.A. in Biology from San Jose State University in 1977, an M.B.A. from Santa Clara University in 1978, an M.A. in Toxicology from San Jose State University in 1986 and a Ph.D. in Immunology from the University of California in 2010. Dr. Maida brings to the Board extensive experience in our industry and significant expertise in clinical development and clinical trials. We believe that his financial and operational experience in our industry provide important resources to our Board.

Punit Dhillon, President, Chief Executive Officer and Director

On March 10, 2011, Mr. Punit Dhillon was appointed Chief Executive Officer. Mr. Dhillon was formerly Vice President of Finance and Operations at Inovio from September 2003 until March 2011. In his corporate finance role, Mr. Dhillon was pivotal to the company raising over $125 million through multiple financings and several licensing deals including early stage deals with Merck and Wyeth. Mr. Dhillon was responsible for implementation of Inovio s corporate strategy, including achievement of annual budgets and milestones. He was also instrumental to the successful in-licensing of key intellectual property and a number of corporate transactions, including the acquisition and consolidation of Inovio AS, a Norwegian DNA delivery company, and the merger with VGX Pharmaceuticals (VGX), which solidified Inovio s position in the DNA vaccine industry. Mr. Dhillon played an effective role as head of operations for Inovio. He completed the integration of the VGX with Inovio, including achieving cost-cutting of over 30% through the synergy assessment of both companies, consolidating four operating locations into two bi-coastal offices, and managing the existing stockholders from both companies. Mr. Dhillon was a director of Auricle Biomedical, a capital pool company, from July 2007 to April 2010. Mr. Dhillon has also previously been a consultant and board member for several TSX Venture Exchange listed early stage life science companies, which matured through advances in their development pipelines and subsequent M&A transactions. Most recently, Mr. Dhillon was involved as a board member in the completion of a trilateral merger between three Capital Pool Companies listed on the TSX Venture Exchange, which completed a qualifying transaction in April 2010 with a company specializing in conservation and demand management accessories for the utilities industry. Prior to joining Inovio, Mr. Dhillon worked for a corporate finance law firm as a law clerk. Since September 1999 to July 2002, he worked with MDS Capital Corp. (now Lumira Capital Corp.) as an intern analyst. Mr. Dhillon is an active member in his community and co-founder of Inbalance Network Inc. an organization focused on promoting an

active lifestyle and grass roots community

Table of Contents

involvement, including scholarships to support students pursuing post-secondary education. Mr. Dhillon has a Bachelor of Arts with honors in Political Science and a minor in Business Administration from Simon Fraser University. Mr. Dhillon s in depth knowledge of our business and operations as our Chief Executive Officer, his experience in the biotechnology and pharmaceutical industry, and his experience with publicly traded companies, position him well to serve as a member of our Board of Directors.

Veronica Vallejo, Chief Financial Officer

Ms. Vallejo serves as our Chief Financial Officer. Ms. Vallejo has been a corporate officer of OncoSec since February 2011, having previously served as our Controller, Secretary and Treasurer prior to being appointed as our Chief Financial Officer in February 2013. Prior to working for us, Ms. Vallejo worked in public accounting since 1997, most recently working as a Senior Manager with Mayer Hoffman McCann P.C., from January 2001 to December 2010. Ms. Vallejo holds a B.S. in Business Administration with an emphasis in accounting from San Diego State University. She is a certified public accountant and a member of the American Institute of Certified Public Accountants.

Term of Office

Our directors are elected at each annual meeting of stockholders and serve until the next annual meeting of stockholders or until their successor has been duly elected and qualified, or until their earlier death, resignation or removal.

Committees of the Board of Directors

On June 30, 2011, our Board of Directors established an Audit Committee, a Compensation Committee, a Nomination and Corporate Governance Committee, a Clinical and Regulatory Affairs Committee and a Financing Committee, each of which has the composition and responsibilities described below.

Audit Committee

The Audit Committee of our Board of Directors consists of Dr. Anthony Maida and Dr. James DeMesa, with Dr. Maida serving as Chairman. Our Board of Directors has determined that each of the members of our Audit Committee is independent within the meaning of applicable Securities and Exchange Commission rules and Rule 803B of the NYSE MKT LLC Company Guide, and has determined that Dr. Maida is an audit committee financial expert, as such term is defined in the rules and regulations of the Securities and Exchange Commission and is financially sophisticated within the meaning of Rule 803B of the NYSE MKT LLC Company Guide. The Audit Committee has oversight responsibilities regarding, among other things: the preparation of our financial statements and our financial reporting and disclosure processes; the administration, maintenance and review of our system of internal controls regarding accounting compliance; our practices and processes relating to internal audits of our financial statements; the appointment of our independent registered public accounting firm and the review of its qualifications and independence; the review of reports, written statements and letters from our independent registered public accounting firm; and our compliance with legal and regulatory requirements in connection with the foregoing. Our Board of Directors has adopted a written charter for our Audit Committee, which is available on our website, www.oncosec.com, under the Investors tab.

Compensation Committee

The Compensation Committee of our Board of Directors consists of Dr. Avtar Dhillon and Dr. James DeMesa, with Dr. Dhillon serving as Chairman. Our Board of Directors has determined that each of the members of our Compensation Committee is independent within the meaning of applicable Securities and Exchange Commission rules and Rule 803A of the NYSE MKT LLC Company Guide. The duties of our Compensation Committee include, without limitation: reviewing, approving and administering compensation programs and arrangements to ensure that they are effective in attracting and retaining key employees and reinforcing business strategies and objectives; determining the objectives of our executive officer compensation programs and the specific objectives relating to CEO compensation, including evaluating the performance of the CEO in light of those objectives; approving the compensation of our other executive officers and our directors; administering our as-in-effect incentive-compensation and equity-based plans; and producing an annual report on executive officer compensation for inclusion in our proxy statement, when required and in accordance with applicable rules and regulations. Our Board of Directors has adopted a written charter for our Compensation Committee, which is available on our website, www.oncosec.com, under the Investors tab.

Nomination and Corporate Governance Committee

The Nomination and Corporate Governance Committee of our Board of Directors consists of Dr. James DeMesa, Dr. Avtar Dhillon and Dr. Anthony Maida, with Dr. DeMesa serving as Chairman. Our Board of Directors has determined that each of the members of our Nomination and Corporate Governance Committee is independent within the meaning of

Table of Contents

applicable Securities and Exchange Commission rules and Rule 803A of the NYSE MKT LLC Company Guide. The responsibilities of the Nomination and Corporate Governance Committee include, without limitation: assisting in the identification of nominees for election to our Board of Directors, consistent with approved qualifications and criteria; determining the composition of the Board of Directors and its committees; recommending to the Board of Directors the director nominees for the annual meeting of stockholders; establishing and monitoring a process of assessing the effectiveness of the Board of Directors; developing and overseeing a set of corporate governance guidelines and procedures; and overseeing the evaluation of our directors and executive officers. Our Board of Directors has adopted a written charter for our Nomination and Corporate Governance Committee, which is available on our website, www.oncosec.com, under the Investors tab.

Clinical and Regulatory Affairs Committee

The Clinical and Regulatory Affairs Committee of our Board of Directors consists of Dr. Anthony Maida and Dr. Avtar Dhillon, with Dr. Maida serving as Chairman. The Clinical and Regulatory Affairs Committee does not currently have a charter. The Clinical and Regulatory Affairs Committee has responsibilities relating to reviewing and providing comments on the clinical development plan for our OMS ImmunoPulse programs, including introducing the clinical team to established opinion leaders, potential doctors and investigators, regulatory contacts and other professionals in the clinical oncology field that could benefit us in executing our development plan.

Financing Committee

Dr. Avtar Dhillon is the Chairman and sole member of our Financing Committee. The Financing Committee does not currently have a charter. The Financing Committee has responsibilities relating to our efforts to obtain adequate funding to finance our development programs and operations.

Family Relationships

Mr. Punit Dhillon, director, President and Chief Executive Officer, is the nephew of Dr. Avtar Dhillon, a director and our Chairman of the Board. No other family relationships exist between any of the directors or executive officers of our company.

Section 16 Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act requires our executive officers, directors and persons who beneficially own more than 10% of our common stock to file initial reports of ownership and reports of changes in ownership with the SEC. Such persons are required by SEC regulations to furnish us with copies of all Section 16(a) forms filed by such person.

Based solely on our review of such forms furnished to us from such reporting persons, we believe that all such filing requirements applicable to our executive officers, directors and more than 10% stockholders were met in a timely manner.

Code of Business Conduct and Ethics

Our Board of Directors has adopted a Code of Business Conduct and Ethics that applies to all of our directors, officers and employees, including our principal executive officer, principal financial officer and principal accounting officer and controller. The Code of Business Conduct and Ethics is available for review on our website at www.oncosec.com, under the Investors tab, and is also available in print, without charge, to any stockholder who requests a copy by writing to us at OncoSec Medical Incorporated, 9810 Summers Ridge Road, Suite 110, San Diego, CA 92121, Attention: Investor Relations. Each of our directors, employees and officers, including our Chief Executive Officer and Chief Financial Officer, and all of our other executive officers, are required to comply with the Code of Business Conduct and Ethics. There have not been any amendments to or waivers from the Code of Business Conduct and Ethics relating to any of our executive officers or directors in the past year.

Corporate Governance Documents

Our corporate governance documents, including the charters of each of the Audit Committee, Compensation Committee and Nomination and Corporate Governance Committee are available, free of charge, on our website at www.oncosec.com, under the Investors tab. Please note, however, that the information contained on the website is not incorporated by reference in, or considered part of, this prospectus. We will also provide copies of these documents, free of charge, to any stockholder upon written request to OncoSec Medical Incorporated, 9810 Summers Ridge Road, Suite 110, San Diego, CA 92121, Attention: Investor Relations.

Table of Contents

EXECUTIVE COMPENSATION

The following table summarizes all compensation recorded by us in each of Fiscal 2013 and Fiscal 2012 for our named executive officers, consisting of (i) our principal executive officer, (ii) our principal financial officer, and (iii) our next most highly compensated executive officer whose total compensation exceeded $100,000 in Fiscal 2013 (of which there were none).

Summary Compensation Table

Name	Fiscal Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($) (4)	Non-Equity Incentive Plan Compensation ($)	Nonqualified Deferred Compensation Earnings ($)	All Other Compensation ($) (3)	Total ($)
Punit Dhillon, President & CEO (1)	2013	$ 293,958	96,000		30,128			20,250	$ 440,336
	2012	$ 247,500			34,699				$ 282,199
Veronica Vallejo, CFO (2)	2013	$ 199,167	48,000		10,813			3,894	$ 261,874
	2012	$ 165,000			10,410				$ 175,410

(1) Mr. Dhillon was appointed our President and Chief Executive Officer on March 10, 2011.

(2) Ms. Vallejo was appointed our Secretary and Treasurer on March 10, 2011 and our Chief Financial Officer on February 8, 2013. Ms. Vallejo is also our Principal Financial and Accounting Officer.

(3) Amounts under the All Other Compensation column consist of the payment of accrued vacation benefits.

(4) The values listed in the above table represent the fair value of the option grants that was recognized during Fiscal 2013 and Fiscal 2012, as applicable, under Accounting Standards Codification Topic 718 and is calculated as of the grant date using a Black-Scholes option-pricing model. For information on the valuation assumptions with respect to the grants made during Fiscal 2013 and Fiscal 2012, refer to Note 9 Stock-Based Compensation in our consolidated financial statements for Fiscal 2013, included in this prospectus.

Outstanding Equity Awards At Fiscal Year-End

The following table summarizes the aggregate number of option awards held by our named executive officers at July 31, 2013.

Name	Number of Securities Underlying Unexercised	Number of Securities Underlying Unexercised	Equity Incentive Plan Awards: Number of	Option Exercise Price ($)	Option Expiration Date

	Options (#) Exercisable	Options (#) Unexercisable	Securities Underlying Unexercised Unearned Options (#)			
Punit Dhillon (1)	330,000	170,000	$	0.21	4/25/22
		250,000		0.23	2/8/23
Veronica Vallejo (2)	99,000	51,000	$	0.21	4/25/22
		100,000	$	0.23	2/8/23

(1) Mr. Dhillon was issued an option to purchase 500,000 shares of our common stock on April 25, 2012. The option vests on the following schedule: 33% upon grant, 33% one year anniversary of grant date, 34% two year anniversary of grant date. Mr. Dhillon was also issued an option to purchase 250,000 shares of our common stock on February 8, 2013. The option vests on the following schedule: 33% one year anniversary of grant date, with the remaining option shares vesting monthly thereafter in equal increments.

(2) Ms. Vallejo was issued an option to purchase 150,000 shares of our common stock on April 25, 2012. The option vests on the following schedule: 33% upon grant, 33% one year anniversary of grant date, 34% two year anniversary of grant date. Ms. Vallejo was also issued an option to purchase 100,000 shares of our common stock on February 8, 2013. The option vests on the following schedule: 33% one year anniversary of grant date, with the remaining option shares vesting monthly thereafter in equal increments.

Table of Contents

Employment Agreements

Punit Dhillon

On May 18, 2011, we entered into an Employment Agreement with our current President and Chief Executive Officer, Mr. Punit Dhillon. The Employment Agreement provides for the following, among other things: (a) an initial annual base salary of $240,000; (b) eligibility to receive an annual bonus at the discretion of the Board of Directors; (c) eligibility to participate in the Company s stock incentive program at the discretion of the Board of Directors; (d) acceleration of vesting of any unvested stock options outstanding upon a change of control of the Company; (e) if Mr. Dhillon is terminated other than for cause, death or disability, or if he terminates his employment with the Company for good reason, Mr. Dhillon is entitled to receive (i) severance payments equal to 24 months of his then current annual base salary, (ii) a pro rata percentage of the annual bonus he had received the prior fiscal year and (iii) payment of health benefits for 24 months, conditioned on his execution of a release; and (f) if Mr. Dhillon s employment is terminated for death or disability, he or his estate is entitled to receive a pro rata percentage of the annual bonus he had received for the prior fiscal year. Mr. Dhillon s Employment Agreement has an initial term of five years.

The term good reason is defined to mean termination by Mr. Dhillon following the occurrence of any of the following events without Mr. Dhillon s consent: (a) Mr. Dhillon ceases to report to the Board of Directors, provided that such change in reporting relationship results in a material reduction in his authority, duties or responsibilities; or (b) any other material reduction in his duties, authority or responsibilities relative to those in effect immediately prior to the reduction.

On April 25, 2012, our Board of Directors approved an increase in Mr. Dhillon s annual base salary to $270,000. On February 8, 2013, our Board of Directors approved an increase in Mr. Dhillon s annual base salary to $320,000.

On April 25, 2012, Mr. Dhillon was granted an option to purchase up to 500,000 shares of our common stock at an exercise price of $0.21 per share under the 2011 Plan. The option vests over a two year period, with 33% vesting immediately upon issuance, 33% vesting on the one year anniversary of the grant date and 34% vesting on the two year anniversary of the grant date. The option may vest immediately upon a corporate transaction or change in control, as defined in the 2011 Plan.

On February 8, 2013, Mr. Dhillon was granted an option to purchase 250,000 shares of our common stock at an exercise price of $0.23 per share under the 2011 Plan. The option vests over a three year period, with 33% vesting on the one year anniversary of grant date and the remaining option shares vesting monthly thereafter in equal increments. The option may vest immediately upon a corporate transaction or change in control, as defined in the 2011 Plan.

Veronica Vallejo

On May 18, 2011, we entered into an Employment Agreement with Ms. Veronica Vallejo, who was then Vice President, Finance and Controller and who is currently our Chief Financial Officer. The Employment Agreement provides for the following, among other things: (a) an initial annual base salary of $140,000; (b) eligibility to receive an annual bonus at the discretion of the Board of Directors; (c) eligibility to participate

in the Company s stock incentive program at the discretion of the Board of Directors; (d) acceleration of vesting of any unvested stock options outstanding upon a change of control of the Company; (e) if Ms. Vallejo is terminated other than for cause, death or disability, or if she terminates her employment with the Company for good reason, she is entitled to receive (i) severance payments equal to six months of her then current annual base salary, (ii) a pro rata percentage of the annual bonus she had received the prior fiscal year and (iii) payment of health benefits for six months, conditioned on her execution of a release; and (f) if Ms. Vallejo s employment is terminated for death or disability, she or her estate is entitled to receive a pro rata percentage of the annual bonus she had received for the prior fiscal year. Ms. Vallejo s Employment Agreement has an initial term of five years.

Table of Contents

The term good reason is defined to mean termination by Ms. Vallejo following the occurrence of any of the following events without Ms. Vallejo s consent: (a) Ms. Vallejo ceases to report directly to the President and Chief Executive Officer or the Board of Directors, provided that such change in reporting relationship results in a material reduction in her authority, duties or responsibilities; or (b) any other material reduction in her duties, authority or responsibilities relative to those in effect immediately prior to the reduction.

On June 30, 2011, Ms. Vallejo was promoted to Vice President, Finance, and a commensurate increase in her base annual salary to $160,000. On April 25, 2012, our Board of Directors approved an increase in Ms. Vallejo s annual base salary to $180,000. On February 8, 2013, our Board of Directors appointed Ms. Vallejo as our Chief Financial Officer and increased in her annual base salary to $220,000.

On August 2, 2013, the Compensation Committee of our Board of Directors approved an amendment to Ms. Vallejo s Employment Agreement, pursuant to which (i) the severance payment payable to Ms. Vallejo in the event of her termination has been amended to equal 12 months instead of six months of her annual base salary at the time of termination, and (ii) the period for which we will pay for applicable premium costs for continued group health plan coverage has been increased from six months to 12 months following the date of her termination, subject in each case to the terms of the Employment Agreement.

On April 25, 2012, Ms. Vallejo was granted an option to purchase up to 150,000 shares of our common stock at an exercise price of $0.21 per share under the 2011 Plan. The option vests over a two year period, with 33% vesting immediately upon issuance, 33% vesting on the one year anniversary of the grant date and 34% vesting on the two year anniversary of the grant date. The option may vest immediately upon a corporate transaction or change in control, as defined in the 2011 Plan.

On February 8, 2013, Ms. Vallejo was granted an option to purchase 100,000 shares of our common stock at an exercise price of $0.23 per share under the 2011 Plan. The option vests over a three year period, with 33% vesting on the one year anniversary of grant date and the remaining option shares vesting monthly thereafter in equal increments. The option may vest immediately upon a corporate transaction or change in control, as defined in the 2011 Plan.

Compensation of Directors

All directors received reimbursement for reasonable out-of-pocket expenses in attending Board of Directors meetings and for promoting our business.

On June 30, 2011, the Board of Directors adopted a director compensation policy for non-employee directors, retroactive to the date of each non-employee director s appointment. According to such policy, the Chairman of our Board of Directors receives an annual fee of $30,000 and all other independent directors receive an annual fee of $15,000 for service on our Board of Directors. In addition, non-employee directors receive the following compensation for serving on the following committees of the Board of Directors:

•The Chairman of the Audit Committee receives $12,000 per year and each member of the Audit Committee receives $6,000 per year;

•The Chairman of the Compensation Committee receives $8,000 per year and each member of our Compensation Committee receives $4,000 per year;

•The Chairman of our Nomination and Corporate Governance Committee receives $6,000 per year and each member of the committee receives $3,000 per year; and

•In recognition of the significant contributions expected of the members of our Clinical and Regulatory Affairs Committee and our Financing Committee, each member of the Clinical and Regulatory Affairs Committee receives $20,000 per year and each member of our Financing Committee receives $40,000 per year.

Additionally, members of all of our committees receive a fee of $1,500 for each committee meeting attended in person and $750 for each committee meeting attended telephonically.

Table of Contents

The following table summarizes all compensation paid to our non-employee directors during Fiscal 2013:

Director Compensation Table

Name	Fees Earned or Paid In Cash ($)	Stock Awards ($)	Option Awards ($)(4)	Non-Equity Incentive Plan Compensation ($)	Nonqualified Deferred Compensation Earnings ($)	All other Compensation ($)	Total ($)
Dr. Avtar Dhillon (1)	$ 110,000		18,514				$ 128,514
Dr. Anthony Maida (2)	$ 60,000		18,514				$ 78,514
Dr. James DeMesa (3)	$ 37,750		18,514				$ 56,264

(1) On April 15, 2013, Dr. Dhillon was granted an option to purchase 100,000 shares of common stock with an exercise price of $0.25 and a ten-year term. The option vests over a one-year period, as follows: 25% on the date of grant, and 25% quarterly thereafter. As of July 31, 2013, Dr. Dhillon held (i) outstanding option awards to purchase up to an aggregate of 200,000 shares of common stock, and (ii) no outstanding stock awards.

(2) On April 15, 2013, Dr. Maida was granted an option to purchase 100,000 shares of common stock with an exercise price of $0.25 and a ten-year term. The option vests over a one-year period, as follows: 25% on the date of grant, and 25% quarterly thereafter. As of July 31, 2013, Dr. Maida held (i) outstanding option awards to purchase up to an aggregate of 300,000 shares of common stock, and (ii) no outstanding stock awards.

(3) On April 15, 2013, Dr. DeMesa was granted an option to purchase 100,000 shares of common stock with an exercise price of $0.25 and a ten-year term. The option vests over a one-year period, as follows: 25% on the date of grant, and 25% quarterly thereafter. As of July 31, 2013, Dr. DeMesa held (i) outstanding option awards to purchase up to an aggregate of 200,000 shares of common stock, and (ii) no outstanding stock awards.

(4) Reflects the dollar amount of the grant date fair value of awards granted during Fiscal 2013, measured in accordance with Accounting Standards Codification Topic 718 and without adjustment for estimated forfeitures. For information on the valuation assumptions with respect to such awards, refer to Note 9 Stock-Based Compensation in our unaudited condensed consolidated financial statements for Fiscal 2013, included in this prospectus.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Transactions with Related Persons

Other than as described below, since August 1, 2010, there have been no transactions, or currently proposed transactions, in which we were or are to be a participant and the amount involved exceeds the lesser of $120,000 or one percent of the average of our total assets at year end for the last three completed fiscal years and in which any related person had or will have a direct or indirect material interest.

On February 11, 2011, we entered into a promissory note arrangement with Poma Management S.A. in the amount of $120,000. Our former director and chief executive officer and a former holder of over 5% of our common stock, Ronald Dela Cruz, is affiliated with Poma Management S.A. The promissory note bore interest at a rate of 10% annually. We made full payment on this promissory note on March 18, 2011.

Mr. Dela Cruz also loaned us an amount of $33,867 to fund operations, which did not include interest terms. On March 18, 2011, we made full payment on this loan.

Director Independence

We are not currently listed on any national securities exchange that has a requirement that the majority of our Board of Directors be independent. However, our Board of Directors has determined that all of the current members of our Board of Directors would be considered independent under Rule 803A of the NYSE MKT LLC Company Guide as applied to directors and to members of audit, nominating and corporate governance and compensation committees of the Board of Directors, except that Punit Dhillon would not be considered independent because he is our President and Chief Executive Officer.

Table of Contents

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth certain information regarding the beneficial ownership of our common stock by (i) each person who, to our knowledge, owns more than 5% of our common stock as of December 5, 2013, (ii) each of our directors and executive officers, and (iii) all of our executive officers and directors as a group. Unless otherwise indicated in the footnotes to the following table, the address of each person named in the table is: c/o OncoSec Medical Incorporated, 9810 Summers Ridge Road, Suite 110, San Diego, CA 92121. Shares of our common stock subject to options, warrants, or other rights currently exercisable or exercisable within 60 days of December 5, 2013, are deemed to be beneficially owned and outstanding for computing the share and percentage ownership of the person holding such options, warrants or other rights, but are not deemed outstanding for computing the percentage ownership of any other person.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage Beneficially Owned (1)
Directors and Named Executive Officers:		
Avtar Dhillon (2)	10,110,480	5.9%
Punit Dhillon (3) (4)	4,724,000	2.8%
Anthony Maida (5)	300,000	*
James DeMesa (2)	450,000	*
Veronica Vallejo (6)	299,000	*
Current Directors and Executive Officers as a Group (5 persons)	15,883,480	9.2%

*Less than 1%

(1) Based on 171,038,526 shares of our common stock issued and outstanding as of December 5, 2013. Except as otherwise indicated, we believe that the beneficial owners of the common stock listed above, based on information furnished by such owners, have sole investment and voting power with respect to such shares, subject to community property laws where applicable. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities.

(2) Includes 200,000 shares of common stock issuable upon exercise of options exercisable within 60 days of December 5, 2013.

(3) Includes 120,000 shares held by Inbalance Network Inc., and 25,000 shares held by Four Front Investments. Mr. Dhillon is a stockholder and managing partner of Inbalance Network, Inc. and Four Front Investments and is deemed to have beneficial ownership of such securities. Also includes 607,000 shares held by Mr. Dhillon s spouse.

(4) Includes 330,000 shares of common stock issuable upon exercise of options exercisable within 60 days of December 5, 2013.

(5) Includes 300,000 shares of common stock issuable upon exercise of options exercisable within 60 days of December 5, 2013.

(6) Includes 99,000 shares of common stock issuable upon exercise of options exercisable within 60 days of December 5, 2013.

LEGAL MATTERS

The validity of the common stock being offered hereby has been passed upon by McDonald Carano Wilson LLP, Reno, Nevada.

EXPERTS

Mayer Hoffman McCann P.C., an independent registered public accounting firm, has audited our consolidated financial statements for the years ended July 31, 2013 and 2012, and for the period from inception (February 8, 2008) to July 31, 2013, as stated in its report appearing herein, and such audited consolidated financial statements have been so included in reliance upon the report of such firm given upon its authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports and proxy statements and other information with the SEC. You may read and copy any document that we file at the SEC s Public Reference Room at 100 F Street, N.E., Washington, D.C.

Table of Contents

20549, on official business days during the hours of 10:00 am and 3:00 pm. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available on the SEC s web site at http://www.sec.gov. Copies of certain information filed by us with the SEC are also available on our web site at http://www.oncosec.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this document.

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock and warrants being offered by this prospectus. This prospectus is part of that registration statement. This prospectus does not contain all of the information set forth in the registration statement or the exhibits to the registration statement. For further information with respect to us and the shares we are offering pursuant to this prospectus, you should refer to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract, agreement or other document referred to are not necessarily complete, and you should refer to the copy of that contract or other documents filed as an exhibit to the registration statement. You may read or obtain a copy of the registration statement at the SEC s public reference room and website referred to above.

Table of Contents

OncoSec Medical Incorporated

(A Development Stage Company)

FINANCIAL STATEMENTS

Index to Financial Statements

Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets at July 31, 2013 and 2012	F-3
Consolidated Statements of Operations for the years ended July 31, 2013 and 2012 and for the Period From Inception (February 8, 2008) to July 31, 2013	F-4
Consolidated Statements of Stockholders Equity (Deficit) for the Period From Inception (February 8, 2008) to July 31, 2013	F-5
Consolidated Statements of Cash Flows for the years ended July 31, 2013 and 2012 and for the Period From Inception (February 8, 2008) to July 31, 2013	F-6
Notes to Consolidated Financial Statements	F-7

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders

OncoSec Medical Incorporated and Subsidiary

We have audited the accompanying consolidated balance sheets of **OncoSec Medical Incorporated and Subsidiary** (a development stage company) as of July 31, 2013 and 2012, and the related consolidated statements of operations, stockholders equity (deficit), and cash flows for the years then ended and for the period from inception (February 8, 2008) to July 31, 2013. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated 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 audits to obtain reasonable assurance about whether the consolidated 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 includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of **OncoSec Medical Incorporated and Subsidiary** as of July 31, 2013 and 2012, and the results of their operations and their cash flows for the years then ended and for the period from inception (February 8, 2008) to July 31, 2013, in conformity with accounting principles generally accepted in the United States of America.

/s/ Mayer Hoffman McCann P.C.
San Diego, California
September 27, 2013

Table of Contents

OncoSec Medical Incorporated

(A Development Stage Company)

Consolidated Balance Sheets

As of July 31, 2013 and July 31, 2012

	July 31, 2013	July 31, 2012
Assets		
Current assets		
Cash and cash equivalents	$ 4,970,175	$ 5,141,509
Prepaid expenses	186,984	343,180
Other current assets	12,528	8,367
Total Current Assets	5,169,687	5,493,056
Property and equipment, net	151,625	76,911
Intangible assets, net	1,161,731	1,858,770
Other long-term assets	26,685	
Total Assets	$ 6,509,728	$ 7,428,737
Liabilities and Stockholders Equity		
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities	$ 729,085	$ 384,321
Accrued compensation		218,849
Accrued income taxes	1,600	3,200
Acquisition obligation, current	979,316	1,416,786
Accrued other	60,603	
Total Current Liabilities	1,770,604	2,023,156
Acquisition obligation, net of current portion		979,316
Total Liabilities	1,770,604	3,002,472
Stockholders Equity		
Common stock authorized - 3,200,000,000 common shares with a par value of $0.0001, common stock issued and outstanding - 118,014,224 and 87,856,000 common shares as of July 31, 2013 and July 31, 2012, respectively	11,802	8,786
Additional paid-in capital	11,467,139	5,593,567
Warrants issued and outstanding - 57,644,276 and 42,246,000 warrants as of July 31, 2013 and July 31, 2012, respectively	6,611,098	5,024,640
Deficit accumulated during the development stage	(13,350,915)	(6,200,728)
Total Stockholders Equity	4,739,124	4,426,265
Total Liabilities and Stockholders Equity	$ 6,509,728	$ 7,428,737

The accompanying notes are an integral part of these consolidated financial statements

Table of Contents

OncoSec Medical Incorporated

(A Development Stage Company)

Consolidated Statements of Operations

	Fiscal Year Ended July 31, 2013	Fiscal Year Ended July 31, 2012	Period from Inception (February 8, 2008) to July 31, 2013
Revenue	$	$	$
Expenses:			
Research and development	3,159,209	2,368,481	6,202,156
General and administrative	3,905,763	3,158,693	8,153,524
Loss from operations	(7,064,972)	(5,527,174)	(14,355,680)
Other income (expense):			
Fair value of derivative liabilities in excess of proceeds			(808,590)
Adjustments to fair value of derivative liabilities		4,192,781	3,150,986
Loss on extinguishment of debt		(761,492)	(761,492)
Financing transaction costs			(210,000)
Non-cash interest expense	(83,215)	(266,567)	(349,782)
Interest expense			(1,357)
Impairment charges			(9,000)
Net loss before income taxes	(7,148,187)	(2,362,452)	(13,344,915)
Provision for income taxes	2,000	2,400	6,000
Net loss	$ (7,150,187)	$ (2,364,852)	$ (13,350,915)
Basic and diluted net loss per common share	$ (0.07)	$ (0.04)	
Weighted average shares used in computing basic and diluted net loss per common share	106,558,325	67,443,432	

The accompanying notes are an integral part of these consolidated financial statements

Table of Contents

OncoSec Medical Incorporated

(A Development Stage Company)

Consolidated Statements of Stockholders Equity (Deficit)

For the period from Inception (February 8, 2008) to July 31, 2013

	Common Stock (1)		Additional Paid-In	Warrants		Deficit Accumulated during the Development	Total Stockholders Equity
	Shares	Amount	Capital (1)	Shares	Amount	Stage	(Deficit)
Balance, February 8, 2008		$	$		$	$	$
Shares issued to founder on Feb 8, 2008	48,000,000	4,800	10,200				15,000
Private placement on June 30, 2008	20,480,000	2,048	29,952				32,000
Net loss						(7,187)	(7,187)
Balance, July 31, 2008	68,480,000	6,848	40,152			(7,187)	39,813
Net loss						(33,714)	(33,714)
Balance, July 31, 2009	68,480,000	6,848	40,152			(40,901)	6,099
Net loss						(36,158)	(36,158)
Balance, July 31, 2010	68,480,000	6,848	40,152			(77,059)	(30,059)
Common stock cancelled	(17,280,000)	(1,728)	1,728				
Private placement on March 18, 2011	1,456,000	146	659,873	1,456,000	431,981		1,092,000
Common stock issued for services	200,000	20	331,980				332,000
Private placement on June 24, 2011	4,000,000	400	(400)	4,000,000			
Net loss						(3,758,817)	(3,758,817)
Balance, July 31, 2011	56,856,000	5,686	1,033,333	5,456,000	431,981	(3,835,876)	(2,364,876)
Issuance of warrants Inovio				4,000,000	958,111		958,111
Expiration of Series B Warrants				(4,000,000)			
Re-classification of Series A Warrants				4,240,000	657,604		657,604
Public offering on March 28, 2012, net of issuance costs of $542,500	31,000,000	3,100	4,227,456	32,550,000	2,976,944		7,207,500
Share-based compensation expense			332,778				332,778
Net loss						(2,364,852)	(2,364,852)
Balance, July 31, 2012	87,856,000	8,786	5,593,567	42,246,000	5,024,640	(6,200,728)	4,426,265
Exercise of stock options	766,500	76	138,224				138,300
Exercise of common stock warrants	441,724	45	181,931	(441,724)	(39,858)		142,118
Common stock issued in connection with license agreement	150,000	15	34,485				34,500
Public offering on December 17, 2012, net of issuance costs of $504,000	28,800,000	2,880	5,066,804	15,840,000	1,626,316		6,696,000

Share-based compensation expense			452,128				452,128
Net loss						(7,150,187)	(7,150,187)
Balance, July 31, 2013	118,014,224	$11,802	$11,467,139	57,644,276	$6,611,098	$(13,350,915)	$4,739,124

(1) Adjusted to reflect the forward stock split of 32-for-1 effective March 1, 2011.

The accompanying notes are an integral part of these consolidated financial statements

Table of Contents

OncoSec Medical Incorporated

(A Development Stage Company)

Consolidated Statements of Cash Flows

	Year Ended July 31, 2013	Year Ended July 31, 2012	Period from Inception (February 8, 2008) to July 31, 2013
Operating activities			
Net loss	$ (7,150,187)	$ (2,364,852)	$ (13,350,915)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	736,875	717,450	1,705,145
Write-down of supplies inventory			38,000
Write-down of web development costs			9,000
Fair value of derivative liabilities in excess of proceeds			808,590
Loss on extinguishment of debt		761,492	761,492
Gain on adjustment to fair value of derivative liabilities		(4,192,781)	(3,150,986)
Non-cash interest expense	83,215	266,567	349,782
Share-based compensation	452,128	332,778	784,906
Common stock paid for services	34,500	249,000	366,500
Changes in operating assets and liabilities:			
(Increase) decrease in prepaid expenses	156,194	(164,220)	(186,986)
(Increase) decrease in other current and long-term assets	(30,845)	7,572	(39,212)
(Decrease) increase in accounts payable and accrued liabilities	344,764	15,146	729,085
(Decrease) increase in accrued compensation	(218,849)	151,075	
(Decrease) increase in accrued other	60,603		60,603
(Decrease) Increase in accrued income taxes	(1,600)	1,600	1,600
Net cash used in operating activities	(5,533,202)	(4,219,173)	(11,113,396)
Investing activities			
Purchases of property and equipment	(114,550)	(54,511)	(239,347)
Investment in intangible assets			(250,000)
Net cash used in investing activities	(114,550)	(54,511)	(489,347)
Financing activities			
Proceeds from issuance of common stock and warrants	7,200,000	7,750,000	19,089,000
Payment of financing and offering costs	(504,000)	(542,500)	(1,046,500)
Payment of amounts due under acquisition obligation	(1,500,000)	(250,000)	(1,750,000)
Proceeds from exercise of warrants and stock options	280,418		280,418
Proceeds from amounts due to stockholder			153,867
Repayment of amounts due to stockholder			(153,867)
Net cash provided by financing activities	5,476,418	6,957,500	16,572,918
Net increase (decrease) in cash	(171,334)	2,683,816	4,970,175
Cash and cash equivalents, at beginning of period	5,141,509	2,457,693	
Cash and cash equivalents, at end of period	$ 4,970,175	$ 5,141,509	$ 4,970,175
Supplemental disclosure for cash flow information:			
Cash paid during the period for:			
Interest	$	$	$ 1,357
Income taxes	$ 2,800	$ 800	$ 3,600

Noncash investing and financing transaction:			
Fair value of placement agent warrants issued in the public offering	$ 228,240	$ 276,980	$ 505,220
Acquisition obligation of asset purchase agreement	$	$	$ 2,750,000
Acquisition obligation discounts - imputed interest and fair value of warrants	$	$ 402,355	$ 402,355

The accompanying notes are an integral part of these consolidated financial statements

Table of Contents

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 Nature of Operations and Basis of Presentation

OncoSec Medical Incorporated (the Company) was incorporated under the name of Netventory Solutions Inc., in the state of Nevada on February 8, 2008 to pursue the business of inventory management solutions. On March 1, 2011, Netventory Solutions Inc. completed a merger with its subsidiary OncoSec Medical Incorporated and changed its name to OncoSec Medical Incorporated. On March 24, 2011, the Company completed the acquisition of certain technology and related assets from Inovio Pharmaceuticals, Inc. (Inovio) pursuant to an Asset Purchase Agreement (the Asset Purchase Agreement) dated March 14, 2011. The acquired technology and related assets relate to the use of drug-medical device combination products for the treatment of various cancers. Since this acquisition, the Company has focused its efforts in the biomedical industry and abandoned its efforts in the online inventory services industry. Prior to the acquisition of the assets from Inovio, the Company had been inactive since March 2010 and had no continuing operations other than those of a company seeking a business opportunity. The Company has not produced any revenues from its newly acquired assets and is considered a development stage company.

The accompanying consolidated financial statements include the accounts of OncoSec Medical Incorporated and its wholly-owned inactive subsidiary, OncoSec Medical Therapeutics Incorporated (OncoSec Medical Therapeutics), which was acquired on June 3, 2011 for a total purchase price of $1,000. OncoSec Medical Therapeutics was incorporated in Delaware on July 2, 2010. There have been no significant transactions related to this subsidiary since its inception. All significant intercompany transactions and balances have been eliminated at consolidation.

Note 2 Significant Accounting Policies

Financial Instruments

The carrying amounts for cash and cash equivalents, prepaid expenses, accounts payable and accrued expenses approximate fair value due to their short-term nature, generally less than three months. The carrying amount of the Company s short-term acquisition obligation outstanding approximates fair value based upon current rates and terms available to us for similar activity. It is management s opinion that the Company is not exposed to significant interest, currency, or credit risks arising from its other financial instruments and that their fair values approximate their carrying values except where separately disclosed.

Derivative Liabilities

The Company accounts for its warrants and other derivative financial instruments as either equity or liabilities based upon the characteristics and provisions of each instrument. Warrants classified as equity are recorded at fair value as of the date of issuance on the Company s consolidated balance sheets and no further adjustments to their valuation are made. Warrants classified as derivative liabilities and other derivative financial instruments that require separate accounting as liabilities are recorded on the Company s consolidated balance sheets at their fair value on the date of issuance and will be revalued on each subsequent balance sheet date until such instruments are exercised or expire, with any changes in

the fair value between reporting periods recorded as other income or expense. Management estimates the fair value of these liabilities using option pricing models and assumptions that are based on the individual characteristics of the warrants or instruments on the valuation date, as well as assumptions for future financings, expected volatility, expected life, yield, and risk-free interest rate.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts in the consolidated financial statements and disclosures made in the accompanying notes to the consolidated financial statements. Actual results could differ materially from the estimates.

Table of Contents

Property and Equipment

The cost of property and equipment is depreciated on a straight-line basis over the estimated useful lives of the related assets. The useful lives of property and equipment for the purpose of computing depreciation are:

Computers and Equipment	3 to 5 years
Computer Software	1 to 3 years
Leasehold Improvements	3 years

Total depreciation expense recorded for the years ended July 31, 2013 and 2012 was approximately $40,000 and $35,000 respectively.

Net Loss Per Share

The Company computes basic net loss per common share by dividing the applicable net loss by the weighted average number of common shares outstanding during the respective period. Diluted earnings per share is computed using the weighted average number of common shares outstanding during the period, plus the dilutive effect of potential future issuances of common stock relating to stock options and other potentially dilutive securities using the treasury stock method. In calculating diluted earnings per share, the dilutive effect of stock options is computed using the average market price for the respective period. In addition, the assumed proceeds under the treasury stock method include the average unrecognized compensation expense of stock options that are in-the-money. This results in the assumed buyback of additional shares, thereby reducing the dilutive impact of stock options. The Company did not include shares underlying stock options and warrants issued and outstanding during any of the periods presented in the computation of net loss per share, as the effect would have been anti-dilutive.

Stock Options to Non-Employees

Expense for stock options granted to non-employees has been determined using the estimated fair value of the stock options issued, based on the Black-Scholes Option Pricing Model. Such options are revalued quarterly until fully vested, with any change in fair value expensed. During the years ended July 31, 2013 and 2012, the Company recorded $11,000 and $25,000, respectively, in research and development expense and $289,000 and $133,000, respectively, in general and administrative expense for stock options granted to non-employees.

Comprehensive Income (Loss)

Comprehensive income or loss includes all changes in equity except those resulting from investments by owners and distributions to owners. The Company did not have any items of comprehensive income or loss other than net loss from operations for the years ended July 31, 2013 and 2012, or for the period from inception (February 8, 2008) through July 31, 2013.

Note 3 Cash and Cash Equivalents and Liquidity

The Company considers all liquid investments with maturities of ninety days or less when purchased to be cash equivalents. As of July 31, 2013 and July 31, 2012, cash and cash equivalents were comprised of cash in checking accounts.

The Company s activities to date have been supported by equity and debt financing. It has sustained losses in previous reporting periods with an inception to date loss of $13,350,915 as of July 31, 2013.

As of July 31, 2013, the Company had cash and cash equivalents of approximately $4.9 million. On September 18, 2013, the Company completed a registered public offering and issued an aggregate of 47,792,000 shares of the Company s common stock and warrants to purchase an aggregate of 23,896,000 shares of the Company s common stock, for net proceeds to the Company, after deducting for fees and expenses, of approximately $11.1 million (the September 2013 Public Offering) (see Note 13) As a result of the September 2013 Public Offering, the Company believes its cash resources are sufficient to meet its anticipated needs during the next twelve months. Even after giving effect to the proceeds received from that public offering, the Company will require additional financing to fund its planned operations, including research and development and clinical trials and commercialization of the intellectual property acquired from Inovio pursuant to the Asset Purchase Agreement (see Note 5). In addition, the Company will require additional financing in order to seek to license or acquire new assets, research and develop any potential patents and the related compounds, and obtain any further intellectual property that the Company may seek to acquire. Additional financing may not be available to the Company when needed or, if available, it may not be obtained on commercially reasonable terms. If the Company is not able to obtain the necessary additional financing on a timely basis, the Company will be forced to delay or scale down some or all of its development activities or perhaps even cease the operation of its business. Historically, the Company has funded its operations primarily through equity financings and it expects that it will continue to fund its operations through equity and debt financing. If the Company raises additional financing by issuing equity securities, its existing stockholders ownership will be diluted.

Table of Contents

Obtaining commercial loans, assuming those loans would be available, will increase the Company s liabilities and future cash commitments. The Company also expects to pursue non-dilutive financing sources. However, obtaining such financing would require significant efforts by the Company s management team, and such financing may not be available, and if available, could take a long period of time to obtain.

Note 4 Fair Value of Financial Instruments

Financial assets and liabilities are measured at fair value, which is defined 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 must maximize the use of observable inputs and minimize the use of unobservable inputs. The following is 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:

•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 for substantially the full term of the assets or liabilities.

•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.

In conjunction with the June 2011 Private Placement, the Company issued warrants with derivative features. These instruments, the Series A and Series C Warrants, were accounted for as derivative liabilities (see Note 7).

The Company used Level 3 inputs for its valuation methodology for the warrant derivative liabilities. The estimated fair values were determined using a Monte Carlo option pricing model based on various assumptions. The Company s derivative liabilities are adjusted to reflect estimated fair value at each period end, with any decrease or increase in the estimated fair value being recorded in other income or expense accordingly, as adjustments to fair value of derivative liabilities.

On February 21, 2012, Series C Warrants to purchase an aggregate of 4,000,000 shares of the Company s stock expired unexercised. On March 28, 2012, the Series A Warrants were reclassified to equity, following the reset of the exercise price to the base floor price of $0.50 per warrant share and an evaluation of the instrument s settlement provisions which were determined to be fixed-for-fixed (see Note 7).

During the year ended July 31, 2012, the estimated fair value of derivative liabilities decreased by $4,192,781. This amount was recorded as other income during the year ended July 31, 2012.

Note 5 Intangible Asset Acquisition and Cross License Agreement

On March 14, 2011, the Company entered into the Asset Purchase Agreement with Inovio, whereby the Company agreed to purchase certain assets of Inovio related to certain non-DNA vaccine and selective electrochemical tumor ablation (SECTA) technology (which we now refer to as the OncoSec Medical System, or OMS), including, among other things: (a) certain patents, including patent applications, and trademarks related to the SECTA technology; (b) certain equipment, machinery, inventory and other tangible assets related to the technology; (c) certain engineering and quality documentation related to the technology; and (d) the assignment of certain contracts related to the technology. In return, the Company agreed to pay Inovio $3,000,000 in scheduled payments and a royalty on commercial product sales related to the SECTA technology. The transaction closed on March 24, 2011. The Asset Purchase Agreement has been amended by the parties to modify the schedule of payments to Inovio (see Note 6).

In connection with the closing of the Asset Purchase Agreement, the Company entered into a cross-license agreement with Inovio. Under the terms of the agreement, the Company granted Inovio a fully paid-up, exclusive, worldwide license to certain of the acquired SECTA technology patents in the field of use of electroporation. No consideration was received by the Company, nor will Inovio be liable for future royalty fees related to this arrangement. Inovio also granted the Company a non-exclusive, worldwide license to certain non-SECTA technology patents held by it in consideration for the following: (a) a fee for any sublicense of the Inovio technology, not to exceed 10%; (b) a royalty on net sales of any business the Company develops with the Inovio technology, not to exceed 10%; and (c) payment to Inovio of any amount Inovio pays to one licensor of the Inovio technology that is a direct result of the license. In addition, the Company agreed not to transfer this non-exclusive license apart from the assigned intellectual property.

Table of Contents

ASC 805, *Business Combinations*, provides guidance on determining whether an acquired set of assets meets the definition of a business for accounting purposes. Under the framework, the acquired set of activities and assets have to be capable of being operated as a business, from the viewpoint of a market participant as defined in ASC 820, *Fair Value Measurements*. Two essential elements required for an integrated set of activities are inputs and outputs. The Company evaluated the Asset Purchase Agreement and in accordance with the guidance, determined it did not meet the definition of a business acquisition as the acquisition consisted solely of the SECTA technology and certain other tangible assets. The Company did not acquire the right to any employees previously involved with the technology, or research processes previously in place at Inovio. The Company has therefore accounted for the transaction as an asset acquisition.

The purchase price was allocated to the identified tangible and intangible assets acquired based on their relative fair values, which were derived from their individual estimated fair values of $38,000 and $3,000,000, respectively. Included in the estimated fair value of the intangible assets is the value associated with the engineering and quality documentation acquired, which was determined to have no stand-alone value apart from the patents. The relative fair value of the intangible assets of $2,962,000 was reduced by a discount of approximately $174,000 recorded for the acquisition obligation (see Note 6). The relative fair value of the tangible assets of $38,000 was expensed to research and development as of the acquisition date.

The following table summarizes the purchase price allocation for the assets acquired:

Intangible assets - patents	$	2,788,154
Tangible assets - machinery, property and inventory	$	38,000

Patents are stated net of accumulated amortization of approximately $1,626,000 and $929,000 as of July 31, 2013 and July 31, 2012, respectively. The patents are amortized on a straight-line basis over the estimated remaining useful lives of the assets, determined as four years from the date of acquisition. Amortization expense for the years ended July 31, 2013 and 2012 was approximately $697,000 and $682,000, respectively. At July 31, 2013, the weighted average remaining amortization period for all patents was approximately 1.67 years. Estimated amortization expense over the annual periods ended July 31, 2014 and 2015 is approximately $697,000 and $465,000, respectively.

In accordance with the provisions of the applicable authoritative guidance, the Company s long-lived assets and amortizable intangible assets are tested for impairment whenever events or changes in circumstances indicate that their carrying value may not be recoverable. The Company assesses the recoverability of such assets by determining whether their carrying value can be recovered through undiscounted future operating cash flows, including its estimates of revenue driven by assumed market segment share and estimated costs. If impairment is indicated, the Company measures the amount of such impairment by comparing the fair value to the carrying value. During the years ended July 31, 2013 and 2012, no impairment was recorded.

Note 6 Acquisition Obligation

On March 24, 2011, the Company recorded an acquisition obligation for amounts due to Inovio in accordance with the Asset Purchase Agreement (see Note 5). On September 28, 2011, the Company entered into a First Amendment to Asset Purchase Agreement (the First Amendment). The First Amendment modified the payment of $750,000 due to Inovio by September 24, 2011, requiring the Company to make a payment of $100,000 to Inovio on September 30, 2011, with the remaining $650,000 to be paid to Inovio at the earlier of: (a) 30 days following the receipt by the Company of aggregate net proceeds of more than $5,000,000 from one or more financings occurring on or after September 30,

2011, or (b) March 31, 2012. On March 24, 2012, the Company entered into a Second Amendment to Asset Purchase Agreement (the Second Amendment). The Second Amendment further modified the payment terms for the $1,150,000 scheduled payments due to Inovio in March 2012 by requiring the Company to make a payment of $150,000 on March 31, 2012, with the remaining $1,000,000 to be paid to Inovio on December 31, 2013. In consideration for the First Amendment, the Company issued to Inovio a warrant to purchase 1,000,000 shares of common stock (see Note 8). In consideration for the Second Amendment, the Company issued to Inovio a warrant to purchase 3,000,000 shares of common stock (see Note 8).

In accordance with ASC 835-30 Interest on Receivables and Payables , the future payments under the acquisition obligation were discounted using the incremental borrowing rate of 5.00%, to arrive at an initial imputed interest discount on the obligation as of the acquisition date of approximately $174,000. The imputed interest discount was recorded as a reduction to the relative fair value of the intangible assets acquired (see Note 5). The discount was revised as of the date of the First and Second Amendments to arrive at a revised imputed interest discount on the obligation of approximately $132,000 as of September 28, 2011 and $145,000 as of March 24, 2012. The increase in imputed interest as of the date of the Second Amendment was primarily due to the extended payment terms. Non-cash interest expense recognized during the years ended July 31, 2013 and 2012 was approximately $83,000 and $152,000, respectively. As of July 31, 2013, the outstanding acquisition obligation was reduced by a short-term imputed interest discount of approximately $21,000.

Table of Contents

The Company evaluated both amendments in accordance with ASC 470-50. The Company determined the modification of the terms upon entry into the First Amendment to the Asset Purchase Agreement on September 28, 2011, was not considered substantial as of that date. In accordance with the guidance, the fair value of the warrants issued to Inovio as consideration for the First Amendment were recorded as a discount to the acquisition obligation to be amortized to interest expense over the remaining term of the modified obligation payable, starting September 28, 2011. On March 24, 2012, the Company entered into the Second Amendment. In accordance with the guidance, the Company evaluated the cumulative impact of both amendments and determined the modification of the terms of the Asset Purchase Agreement as a result of the Second Amendment was considered substantial. The Company recorded the difference between the re-acquisition price and carrying value of the debt as of the modification date of March 24, 2012 as a loss on debt extinguishment of $761,492. The loss on debt extinguishment recorded resulted in the write-off of the unamortized portion of the discount to the debt obligation initially recorded upon entry into the First Amendment in the amount of approximately $113,000 as of March 24, 2012. As of March 24, 2012, the acquisition obligation s fair value was $2,504,178. During the year ended July 31, 2012, approximately $115,000 was recognized as non-cash interest expense for amortization of the discount to the acquisition obligation.

The scheduled payments for the $3,000,000 obligation under this arrangement, as amended, are as follows:

- $ 250,000 - Upon the closing of the Asset Purchase Agreement
- $ 100,000 - September 30, 2011
- $ 150,000 - March 31, 2012
- $ 500,000 - September 24, 2012
- $ 1,000,000 - March 31, 2013
- $ 1,000,000 - December 31, 2013

On March 24, 2011, September 30, 2011, March 30, 2012 and September 24, 2012, the Company made payments of $250,000, $100,000, $150,000 and $500,000, respectively, to Inovio. On May 15, 2013, the Company made the March 31, 2013 payment of $1,000,000 to Inovio, which payment did not constitute a default under the Asset Purchase Agreement.

Note 7 Private Placements and Public Offerings

March 2011 Private Placement

On March 18, 2011, the Company closed a private placement whereby it issued 1,456,000 units at a purchase price of $0.75 per unit for gross proceeds of $1,092,000. Each unit consists of one share of common stock and one share purchase warrant entitling the holder to acquire one share of common stock at a price of $1.00 per share for a period of five years from the closing of the private placement. The fair value of the warrants, based on their fair value relative to the common stock issued, was $431,981 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 89.68%, and a risk-free interest rate of 2.11%). The warrants were exercisable as of March 18, 2011 and any unexercised warrants will expire on March 18, 2016. The Company completed an evaluation of the warrants issued in connection with

this private placement and determined the warrants should be classified as equity within the consolidated balance sheets as the instrument s settlement provisions were fixed-for-fixed.

June 2011 Private Placement

On June 24, 2011, the Company closed a private placement whereby it issued an aggregate of 4,000,000 shares of the Company s common stock at a purchase price of $0.75 per share, and three series of warrants, the Series A Warrants, the Series B Warrants and the Series C Warrants, to purchase an aggregate of 12,000,000 shares of the Company s common stock, for proceeds to the Company of $3.0 million (the June 2011 Private Placement). After deducting for fees and expenses, the aggregate net proceeds from the sale of the common stock and the warrants in the June Private Placement were approximately $2.79 million.

Pursuant to the terms of the Securities Purchase Agreement, each investor was issued a Series A Warrant, a Series B Warrant and a Series C Warrant, each to purchase up to a number of shares of the Company s common stock equal to 100% of the shares issued to such investor. The Series A Warrants have an exercise price of $1.20 per share, are exercisable immediately upon issuance and have a term of exercise equal to five years. The Series B Warrants have an exercise price of $0.75 per share, are exercisable immediately upon issuance and expire on February 21, 2012. The Series C Warrants have an exercise price of $1.20 per share, vest and are exercisable ratably commencing on the exercise of the Series B Warrants held by each investor and have a term of exercise equal to five years. The Series C Warrants also expire if the Series B Warrants expire unexercised. On February 21, 2012, the Series B and Series C Warrants expired unexercised.

Table of Contents

On June 24, 2011, in connection with the closing of the June 2011 Private Placement, the Company and the Purchasers entered into a registration rights agreement pursuant to which the Company is required to file a registration statement within 30 days following such closing to register the resale of the common stock and the common stock underlying the warrants issued in the June 2011 Private Placement. The failure on the part of the Company to meet the filing deadlines and other requirements set forth in the registration rights agreement may subject the Company to payment of certain monetary penalties, up to a maximum of 9% of the aggregate proceeds of the June 2011 Private Placement. As of July 31, 2013 the Company was in compliance with the requirements set forth in the registration rights agreement.

In addition, pursuant to the terms of a placement agent agreement entered into with the lead placement agent on June 1, 2011 and amended on June 21, 2011, the Company agreed to pay the lead placement agent and the co-placement agent fees equal to 6% of the aggregate gross proceeds raised in the private placement of $180,000 and reimbursement to the lead placement agent for certain expenses in the amount of $30,000. The total cash fees of $210,000 paid to the placement agents were recorded as a period expense as of the closing date. In connection with the agreement, the Company also issued to the placement agents Series A Warrants to purchase 6% of the aggregate common stock issued in the June 2011 Private Placement, or 240,000 shares of common stock.

Allocation of Proceeds

At the closing date of the June 2011 Private Placement, the estimated fair value of the Series A and Series C Warrants exceeded the proceeds from the June 2011 Private Placement of $3,000,000 (see the valuations of these derivative liabilities under the heading, Derivative Liabilities below). As a result, all of the proceeds were allocated to these derivative liabilities and no proceeds remained for allocation to the common stock and Series B Warrants issued in the financing.

Common Stock

At the closing date of the June 2011 Private Placement, the Company issued 4,000,000 shares of unregistered common stock and recorded the par value of the shares issued of $400 (at par value of $0.0001 per share) with a corresponding reduction to paid-in capital, given that there was no allocated value from the proceeds to the common stock.

Derivative Liabilities

The Company accounted for the Series A and C Warrants in accordance with accounting guidance for derivatives. The accounting guidance provides a two-step model to be applied in determining whether a financial instrument is indexed to an entity s own stock that would qualify such financial instruments for a scope exception. This scope exception specifies that a contract that would otherwise meet the definition of a derivative financial instrument would not be considered as such if the contract is both (i) indexed to the entity s own stock and (ii) classified in the stockholders equity section of the balance sheet. The Company determined that its Series A and Series C Warrants were ineligible for equity classification as a result of the anti-dilution provisions in the Series A and Series C Warrants that may result in an adjustment to the warrant exercise price.

On the closing date of the June 2011 Private Placement, the derivative liabilities were recorded at an estimated fair value of $3,808,590. Given that the fair value of the derivative liabilities exceeded the total proceeds of the private placement of $3,000,000, no net amounts were allocated to the common stock. The $808,590 amount by which the recorded liabilities exceeded the proceeds was charged to other expense at the closing date. The Company revalued the derivative liability as of each subsequent balance sheet date, with any changes in the fair value between reporting periods recorded as other income or expense.

On March 28, 2012, the anti-dilution provisions of the Series A Warrants were triggered upon the closing of the Company s March 2012 registered public offering, which resulted in the reset of the exercise price of the Series A Warrants to the base floor price of $0.50. The fair value of the derivative liabilities as of March 28, 2012 was $657,604. The reset of the exercise price to the base floor price caused the anti-dilution provisions to become void as of March 28, 2012 and for future periods. As a result, on March 28, 2012, the Series A Warrants were reclassified as equity within the Company s consolidated financial statements, at a fair value of $657,604.

Table of Contents

The change in the estimated fair value of the Series A and C Warrants during the year ended July 31, 2012, resulted in other income of $4,192,781. Such change in the estimated fair value was primarily due to the fluctuation in the Company s common stock price and updates to the assumptions used in the option pricing models.

The derivative liabilities were valued as of March 28, 2012, using a Monte Carlo valuation model with the following assumptions:

	March 28, 2012
Closing price per share of common stock	0.22
Exercise price per share	0.50
Expected volatility	125.0%
Risk-free interest rate	1.05%
Dividend yield	
Floor price	0.50
Remaining expected term of underlying securities (years)	4.24

In addition, as of the valuation date, management assessed the probabilities of future financings assumptions in the Monte Carlo valuation models.

March 2012 Public Offering

On March 28, 2012, the Company closed a registered public offering of an aggregate of 31,000,000 shares of the Company s common stock and warrants to purchase an aggregate of 31,000,000 shares of common stock for gross proceeds to the Company of $7.75 million (the March 2012 Public Offering). On March 23, 2012, the Company entered into a Securities Purchase Agreement (the Securities Purchase Agreement) for the issuance and sale by the Company of the common stock and warrants in the March 2012 Public Offering. After deducting for fees and expenses, the aggregate net proceeds from the March 2012 Public Offering were approximately $7.2 million.

Pursuant to the terms of the Securities Purchase Agreement, at the closing each purchaser was issued a warrant to purchase up to a number of shares of the Company s common stock equal to 100% of the shares issued to such purchaser in the offering. The warrants have an exercise price of $0.35 per share, are exercisable immediately upon issuance and have a term of exercise equal to five years from the date of issuance of the warrants, or March 28, 2017.

Pursuant to a Placement Agent Agreement dated January 23, 2012 by and between the Company and Rodman & Renshaw, LLC (Rodman), as subsequently amended on March 12, 2012 (as amended, the Placement Agent Agreement), Rodman agreed to act as the Company s placement agent in connection with the offering. Under the Placement Agent Agreement, the Company agreed to pay Rodman a cash fee equal to 6% of the gross proceeds of the offering, as well as a non-accountable expense allowance equal to 1% of the gross proceeds of the offering. In addition, the Company agreed to issue to the placement agent warrants to purchase up to an aggregate of 5% of the aggregate number of shares of common stock sold in the offering, or warrants to purchase 1,550,000 shares of the Company s common stock (the Placement Agent Warrants). As permitted under the Placement Agent Agreement, the Company elected to pay 30% of the 5% Placement Agent Warrants directly to Roth Capital Partners, LLC (Roth), who acted as financial advisors in the offering, and as a result issued to Rodman a Placement Agent Warrant to purchase 1,085,000 shares of common stock and issued to Roth a Placement Agent Warrant to purchase 465,000 shares of common

stock. The Placement Agent Warrants have substantially the same terms as the warrants issued to the purchasers in the offering, except that such warrants have an exercise price of $0.3125 and shall expire on March 23, 2017. The fair value of the Placement Agent Warrants was $276,980 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 125.0%, and a risk-free interest rate of 1.05%), and was recorded as an offering cost. The Placement Agent Warrants and the shares of the Company s common stock underlying the Placement Agent Warrants have not been registered under the Securities Act of 1933, as amended (the Securities Act).

The fair value of the warrants issued in connection with the March 2012 Public Offering to the purchasers, based on their fair value relative to the common stock issued, was $3,206,486 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 125.0%, and a risk-free interest rate of 1.05%). The Company completed an evaluation of all of the warrants issued in connection with this offering and determined the warrants should be classified as equity within the consolidated balance sheet.

Table of Contents

December 2012 Public Offering

On December 17, 2012, the Company closed a registered public offering of an aggregate of 28,800,000 shares of the Company s common stock and warrants to purchase an aggregate of 14,400,000 shares of common stock for gross proceeds to the Company of $7.2 million (the December 2012 Public Offering). On December 12, 2012, the Company entered into a Securities Purchase Agreement (the Securities Purchase Agreement) for the issuance and sale by the Company of the common stock and warrants in the December 2012 Public Offering. After deducting for fees and expenses, the aggregate net proceeds from the sale of the common stock and the warrants in the December 2012 Public Offering were approximately $6.7 million.

Pursuant to the terms of the Securities Purchase Agreement, at the closing each purchaser was issued a warrant to purchase up to a number of shares of the Company s common stock equal to 50% of the shares issued to such purchaser in the offering. The warrants have an exercise price of $0.26 per share, are exercisable immediately upon issuance and have a term of exercise equal to four years from the date of issuance of the warrants, or December 17, 2016.

Pursuant to a Placement Agent Agreement dated November 16, 2012 by and between the Company and Dawson James Securities, Inc. (Dawson), Dawson agreed to act as the Company s placement agent in connection with the offering. Under the Placement Agent Agreement, the Company agreed to pay Dawson a cash fee equal to 6% of the gross proceeds of the offering, as well as a non-accountable expense allowance equal to 1% of the gross proceeds of the offering. In addition, the Company agreed to issue to the placement agent warrants to purchase up to an aggregate of 5% of the aggregate number of shares of common stock sold in the offering, or warrants to purchase 1,440,000 shares of the Company s common stock (the Placement Agent Warrants). As permitted under the Placement Agent Agreement, the Company elected to pay 50% of the 5% Placement Agent Warrants directly to Noble International Investments, Inc. and Burrill LLC (Noble and Burrill , respectively), who acted as financial advisors in the offering, and as a result issued to Dawson a Placement Agent Warrant to purchase 720,000 shares of common stock, and issued to Noble and Burrill Placement Agent Warrants to purchase 360,000 shares of common stock each. The Placement Agent Warrants have substantially the same terms as the warrants issued to the purchasers in the offering, except that such warrants have an exercise price of $0.3125 and shall expire on December 11, 2017. The fair value of the Placement Agent Warrants was $228,240 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 98.09%, and a risk-free interest rate of 0.74%), and was recorded as an offering cost. The Placement Agent Warrants and the shares of the Company s common stock underlying the Placement Agent Warrants have not been registered under the Securities Act.

The fair value of the warrants issued in connection with the December 2012 Public Offering to the purchasers, based on their fair value relative to the common stock issued, was $2,151,360 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 96.66%, and a risk-free interest rate of 0.56%). The Company completed an evaluation of all of the warrants issued in connection with this offering and determined the warrants should be classified as equity within the consolidated balance sheets.

Note 8 Other Equity and Common Stock Transactions

On March 1, 2011, the Company effected a 32 for one forward stock split of its authorized, issued and outstanding common stock. As a result, its authorized capital increased from 100,000,000 shares of common stock at $0.001 par value to 3,200,000,000 shares of common stock at $0.0001 par value, and its outstanding common stock has increased from 2,140,000 shares of common stock to 68,480,000 shares of common stock as of that date. The accompanying consolidated financial statements for the annual prior periods presented have been retroactively adjusted to reflect the effects of the forward stock split.

On March 22, 2011, 17,280,000 shares of common stock held by previous majority stockholders were returned to the Company for no consideration. The shares were not retired and are available for future issuance.

On May 9, 2011, the Board of Directors authorized the issuance of 200,000 fully vested shares of the Company s common stock to a consultant in exchange for advisory services. The shares were valued at $332,000, based on the closing price of the Company s common stock on the date of issuance, and are amortized over the service period of twelve months.

On September 28, 2011, in consideration for the First Amendment entered into with Inovio, the Company issued to Inovio a warrant to purchase 1,000,000 shares of the Company s common stock (see Note 6). The warrant has an exercise price of $1.20 per share, is exercisable immediately upon issuance and has an exercise term of five years. The warrant also contains a mandatory exercise provision allowing the Company to request the exercise of the warrant in whole provided that the Company s Daily Market Price (as defined in the warrant) is equal to or greater than $2.40 for twenty consecutive trading days. The Company completed an evaluation of the warrant issued in connection with this private placement and determined

Table of Contents

the warrants should be classified as equity within the consolidated balance sheet. The fair value of the warrant was $228,509 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 87.62%, and a risk-free interest rate of 0.96%). In accordance with the guidance, the fair value of the warrant was recorded as a discount to the acquisition obligation and amortized to interest expense over the remaining term of the modified obligation payable (see Note 6).

On March 24, 2012, in consideration for the Second Amendment entered into with Inovio, the Company issued to Inovio a warrant to purchase 3,000,000 shares of the Company s common stock (see Note 6). The warrant has an exercise price of $1.00 per share, is exercisable immediately upon issuance and has an exercise term of five years. The warrant also contains a mandatory exercise provision allowing the Company to request the exercise of the warrant in whole provided that the Company s Daily Market Price (as defined in the warrant) is equal to or greater than $2.40 for twenty consecutive trading days. The Company completed an evaluation of the warrant issued in connection with this private placement and determined the warrants should be classified as equity within the consolidated balance sheet. The fair value of the warrant was $729,602 (based on the Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 125.0%, and a risk-free interest rate of 1.04%). In accordance with the applicable guidance, the fair value of the warrant was recorded as part of the loss on debt extinguishment as of the issuance date (see Note 6).

On December 18, 2012, the Board of Directors authorized the issuance of 150,000 fully vested shares of the Company s common stock to the University of South Florida Research Foundation in connection with an agreement to license certain intellectual property to the Company entered into on August 24, 2012. The shares were valued at $34,500, based on the closing price of the Company s common stock on the date of issuance. The shares have not been registered under the Securities Act and were issued in reliance on an exemption from the registration requirements of the Securities Act afforded by Section 4(2) thereof. The Company is responsible for payments upon the achievement of specified milestones and royalty payments at specified percentages of net sales of licensed products and processes, as defined, upon commercialization of stipulated licensed products or processes. The first payment will be for $50,000 upon the start of a future Phase II clinical trial for specific indications, $100,000 upon the start of a specified future Phase III clinical trial and $250,000 upon FDA approval under certain conditions. The Company also agreed to pay for certain patent prosecution and filing fees.

At July 31, 2013, the Company had outstanding warrants to purchase 57,644,276 shares of common stock, with exercise prices ranging from $0.26 to $1.20, all of which were classified as equity instruments. These warrants expire at various times between March 2016 and December 2017.

The Company has not adopted any policy regarding payment of dividends. No dividends have been paid during the periods presented.

Note 9 Stock-Based Compensation

In May 2011, the Company s Board of Directors adopted the OncoSec Medical Incorporated 2011 Stock Incentive Plan (the 2011 Plan). The 2011 Plan was approved by the Company s stockholders in March 2012 and originally authorized the Board of Directors to grant equity awards to employees, directors, and consultants for up to 5,200,000 shares of common stock. On April 15, 2013, the Company s stockholders approved an amendment to the 2011 Plan to authorize the issuance of an additional 3,800,000 shares of common stock under the 2011 Plan, increasing the total number of shares reserved for issuance under the 2011 Plan to 9,000,000 shares. Incentive stock options are to be granted at a price that is no less than 100% of the fair value of the stock at the date of grant. Options vest over a period specified in individual option agreements entered into with grantees, and are exercisable for a maximum period of ten years after the date of grant. Options granted to stockholders who own more than 10% of the outstanding stock of the Company at the time of grant must be issued at an exercise price no less than 110% of the fair value of the stock on the date of grant.

During the year ended July 31, 2013, the Company granted options to purchase 685,000 and 300,000 shares of the Company s common stock to employees and directors, respectively, under the 2011 Plan. The options issued to employees have a ten-year term, vest over a range of two to three years and have exercise prices ranging from $0.20 to $0.42. The options issued to directors have a ten-year term, vest quarterly in equal increments over one year and have an exercise price of $0.25. During the year ended July 31, 2013, the Company also granted options to purchase 2,030,000 shares of the Company s common stock to consultants under the 2011 Plan. The options issued to consultants have three to ten year terms, vest in accordance with the terms of the applicable consulting agreement, and have exercise prices ranging from $0.18 to $0.35.

Table of Contents

During the year ended July 31, 2012, the Company granted options to purchase 1,300,000 and 400,000 shares of the Company s common stock to employees and directors, respectively, under the 2011 Plan. The options issued to employees have a ten-year term, vest over two years and have exercise prices ranging from $0.21 to $0.40. The options issued to directors have a ten-year term, vest quarterly in equal increments over one year and have exercise prices ranging from $0.21 to $0.40. During the year ended July 31, 2012, the Company also granted options to purchase 1,560,000 shares of the Company s common stock to consultants under the 2011 Plan. The options issued to consultants have three to ten year terms, vest in accordance with the terms of the applicable consulting agreement, and have exercise prices ranging from $0.18 to $0.39.

The Company recognizes compensation expense for stock option awards on a straight-line basis over the applicable service period of the award. The service period is generally the vesting period, with the exception of options granted subject to a consulting agreement, whereby the option vesting period and the service period are defined pursuant to the terms of the consulting agreement. Share-based compensation expense for awards granted during the years ended July 31, 2013 and 2012, were based on the grant date fair value estimated using the Black-Scholes Option Pricing Model.

The following assumptions were used to calculate the fair value of share-based compensation during the years ended:

	July 31, 2013	July 31, 2012
Expected volatility	80.32% - 97.85%	85.96 - 125.00%
Risk-free interest rate	0.31% - 1.97%	0.35% - 2.08%
Expected forfeiture rate	0.00%	0.00%
Expected dividend yield		
Expected term	3 - 10 years	3 - 10 years

Expected price volatility is the measure by which the Company s stock price is expected to fluctuate during the expected term of an option. The Company exited shell status on March 24, 2011. In situations where a newly public entity has limited historical data on the price of its publicly traded shares and no other traded financial instruments, authoritative guidance is provided on estimating this assumption by basing its expected volatility on the historical, expected, or implied volatility of similar entities whose share option prices are publicly available. In making the determination as to similarity, the guidance recommends the consideration of industry, stage of life cycle, size and financial leverage of such other entities. The Company s expected volatility is derived from the historical daily change in the market price of its common stock since it exited shell status, as well as the historical daily changes in the market price for the peer group as determined by the Company.

The expected term of the options represents the period that stock-based awards are expected to be outstanding based on the simplified method provided in ASC Topic 718, which averages an award s weighted-average vesting period and contractual term for share options and warrants. The Company will continue to use the simplified method until it has the historical data necessary to provide a reasonable estimate of expected life in accordance with ASC Topic 718, as amended by SAB 110. For the expected term of options issued to employees and directors, the Company used the simplified method. The Company expects to continually evaluate its historical data as a basis for determining the expected terms of options granted under the 2011 Plan.

The Company s estimation of the expected term for stock options granted to parties other than employees or directors is the contractual term of the option award. For the purposes of estimating the fair value of stock option awards, the risk-free interest rate used in the Black-Scholes calculation is based on the prevailing U.S. Treasury yield. The Company has never paid any dividends on its common stock and does not anticipate paying dividends on its common stock in the foreseeable future.

Stock-based compensation expense recognized in the Company s consolidated statements of operations is based on awards ultimately expected to vest, reduced for estimated forfeitures. Authoritative guidance requires forfeitures to be estimated at the time of grant, and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Due to the Company s minimal stock-based compensation activity, the Company has not had significant forfeitures of stock options granted to employees and directors. Therefore, the Company has estimated the forfeiture rate of its outstanding stock options as zero, but will continually evaluate its historical data as a basis for determining expected forfeitures.

Share-based compensation expense recorded in the Company s consolidated statements of operations for the years ended July 31, 2013 and 2012 resulting from share-based compensation awarded to the Company s employees, directors and consultants was approximately $452,000 and $333,000, respectively. Of these balances during the years ended July 31, 2013 and 2012, $41,000 and $89,000, respectively, was recorded to research and development, and $411,000 and $244,000, respectively, was recorded in general and administrative in the Company s consolidated statements of operations.

Table of Contents

A summary of the Company s stock option activity for the years ended July 31, 2013 and 2012, is as follows:

	Option Shares Outstanding	Weighted-Average Exercise Price	Aggregate Intrinsic Value ($000 s)
Balance at July 31, 2011		$	$
Granted	3,260,000	0.24	
Exercised			
Forfeited / Cancelled	(85,000)	0.40	
Balance at July 31, 2012	3,175,000	0.24	24
Granted	3,015,000	0.22	232
Exercised	(766,500)	0.18	52
Forfeited / Cancelled	(273,500)	0.33	9
Balance at July 31, 2013	5,150,000	$ 0.23	$ 372

Range of Exercise Prices	Number of Shares Outstanding	Weighted Average Contractual Life (in years)	Weighted Average Exercise Price	Number Of Shares Exercisable	Weighted Average Remaining Contractual Life (in years)	Weighted Average Exercise Price
$ 0.18 - 0.42	5,150,000	6.08	$ 0.25	3,387,700	5.58	$ 0.23

The weighted-average grant date fair value of stock options granted during the years ended July 31, 2013 and 2012 were $0.14 and $0.18, respectively. As of July 31, 2013, there was approximately $227,000 of unrecognized non-cash compensation cost related to unvested options, which will be recognized over a weighted average period of 1.28 years.

Note 10 Income Taxes

The FASB Topic on Income Taxes prescribes a recognition threshold and measurement attribute criteria for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not to be sustained upon examination by taxing authorities. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. The Company has had no unrecognized tax benefits.

The Company s practice is to recognize interest and/or penalties related to income tax matters in income tax expense. The Company had an accrual of $0 and $0 for interest or penalties on the Company s consolidated balance sheets at July 31, 2013 and July 31, 2012 respectively, and has recognized $0 and $0 of interest and/or penalties in the consolidated statements of operations for the years ended July 31, 2013 and 2012, respectively.

The Company is subject to taxation in the United States and California. The Company s tax years for 2008 and forward are subject to examination by the United States and California tax authorities due to the carry forward of unutilized net operating losses and research and development credits.

At July 31, 2013, the Company had federal and California income tax net operating loss carryforwards of approximately $11,989,000 and $11,832,000, respectively. In addition, the Company has federal and California research and development tax credit carryforwards of approximately $133,000 and $140,000, respectively. The Company also has California Hiring Credits of approximately $9,300. The federal net operating loss, research tax credit carryforwards and California net operating loss carryforwards will begin to expire in 2030 unless previously utilized. The California research and development credit carryforwards will carry forward indefinitely until utilized. The Company has not completed a study to assess whether an ownership change has occurred, as defined by IRC Section 382/383 or whether there have been multiple ownership changes since the Company s formation due to the complexity and cost associated with such a study, and the fact that there may be additional such ownership changes in the future. Based on a preliminary assessment, the Company believes that an ownership change occurred in 2011. The Company estimates that if such a change did occur, the federal and state net operating loss carry-forwards and research and development credits that can be utilized in the future will be significantly limited. There can be no assurance that the Company will ever be able to realize the benefit of some or all of the federal and state loss carryforwards or the credit carryforwards, either due to ongoing operating losses or due to ownership changes, which limit the usefulness of the loss carryforwards.

Table of Contents

Significant components of the Company s deferred tax assets as of July 31, 2013 and 2012 are listed below (in thousands):

	2013	2012
Net operating loss carryforwards	4,444,000	1,986,000
Credits	190,000	124,000
Start-up costs	67,000	72,000
Accumulated Depreciation	450,000	282,000
Other	253,000	129,000
Net deferred tax assets	5,404,000	2,593,000
Valuation allowance for deferred tax assets	(5,404,000)	(2,593,000)
Net deferred taxes	$	$

A valuation allowance of $5,404,000 and $2,593,000 at July 31, 2013 and 2012, respectively, has been recognized to offset the net deferred tax assets as realization of such assets is uncertain.

A reconciliation of incomes taxes using the statutory income tax rate, compared to the effective rate, is as follows:

	2013	2012
Federal tax benefit a the expected statutory rate	34.00%	34.00%
State income tax, net of federal tax benefit	(0.01)%	(0.07)%
Loss on extinguishment of debt	(0.00)%	(11.48)%
Adjustment to fair value of derivative liabilities	0.00%	63.20%
Non-deductible expenses	(0.08)%	(6.63)%
Change in valuation allowance	(33.93)%	(81.58)%
Other	0.00%	2.45%
Income tax benefit effective rate	(0.02)%	(0.11)%

Note 11 Commitments and Contingencies

In the ordinary course of business, the Company may become a party to lawsuits involving various matters. The Company is unaware of any such lawsuits presently pending against it which individually or in the aggregate, are deemed to be material to the Company s financial condition or results of operations.

On May 12, 2011, the Company entered into a one-year lease agreement for office space, with a base annual rent of $42,000. On June 1, 2012, the Company entered into an amendment to its lease agreement. The lease amendment extended the lease term for a period of seven months commencing on June 1, 2012, through December 31, 2012. The amendment also increased the base monthly rent to approximately $10,000. On December 18, 2012, the Company entered into a second amendment to its lease agreement. The second amendment extended the lease term for a period of six months commencing on January 1, 2013 through June 30, 2013, with no changes to remaining terms of the lease.

On May 31, 2013, the Company entered into a thirty-eight month lease agreement for new office space, commencing on July 1, 2013. The initial base monthly rent is approximately $8,000, with scheduled annual increases of 3%. Under the terms of the lease agreement, the Company received a tenant improvement allowance of approximately $60,000, which was classified as deferred rent and is being amortized on a straight-line basis over the term of the lease as a reduction to rent expense. Tenant improvements associated with the lease agreement are recorded as an addition to leasehold improvements and are being amortized over the shorter of the estimated useful life of the improvement or the remaining life of the lease.

At July 31, 2013, future minimum lease payments under the non-cancelable operating leases are as follows:

Year Ended July 31,		**Operating Lease**
2014	$	86,390
2015		100,860
2016		103,891
2017		8,895
Total minimum payments	$	300,036

On May 18, 2011, the Company entered into Employment Agreements with a term of five years with each of its President and Chief Executive Officer, its Chief Business Officer and its Chief Financial Officer, who was then our VP Finance and Controller, (the Officers Under the terms of the agreements, if any of the Officers are terminated other than for cause, death or disability, or if the case of termination of employment with the Company for good reason, the Officers are

Table of Contents

entitled to receive (i) severance payments equal to between six and twenty four months of the then-current annual base salary, (ii) a pro rata percentage of the annual bonus received the prior fiscal year and (iii) payment of health benefits for a period between six and twenty four months, conditioned on the execution of a release. In addition, in the event of a change in control of the Company, the agreements provide for the acceleration of vesting of any unvested stock options outstanding. Effective April 26, 2012, as a result of the termination of employment of the Company s Chief Business Officer and his execution of a release, the Company recorded a severance liability of $220,000 in accordance with the terms of the Employment Agreement and the separation release. On August 2, 2013, the Employment Agreement with the Company s Chief Financial Officer was amended to increase (i) the severance payment in the event of termination to equal 12 months instead of six months of the Chief Financial Officer s annual base salary at the time of the termination, and (ii) the period for which the Company will pay for applicable premium costs for continued group health plan coverage to 12 months instead of six months following the date of the termination, subject in each case to the terms of the Employment Agreement.

Effective May 15, 2012, the Company adopted a defined contribution savings plan pursuant to Section 401(k) of the Internal Revenue Code. The plan is for the benefit of all qualifying employees and permits voluntary contributions by employees up to 100% of eligible compensation, subject to the Internal Revenue Service imposed maximum limits. The terms of the plan allows for discretionary employer matching contributions. No employer matching contributions were made during the years ended July 31, 2013 and 2012.

Note 12 Related Party Transactions

The Company s Chairman of the Board of Directors is also a director and the Chairman (formerly Executive Chairman) of Inovio. The Company s Chairman abstained from all discussions and voting related to negotiations of the Asset Purchase Agreement disclosed in Note 5 and the amendments (and related warrants) disclosed in Notes 6 and 8, while performing his duties as Executive Chairman of Inovio.

Note 13 Subsequent Events

On September 18, 2013, the Company closed the September 2013 Public Offering and issued an aggregate of 47,792,000 shares of its common stock and warrants to purchase an aggregate of 23,896,000 shares of common stock for gross proceeds of approximately $11.95 million. The warrants have an exercise price of $0.35 per share, are exercisable immediately upon issuance and have a term of exercise equal to four years from the date of issuance of the warrants. After deducting for fees and expenses, the aggregate net proceeds to the Company from the sale of the common stock and the warrants in the September 2013 Public Offering were approximately $11.1 million.

In connection with the offering, the Company paid placement agent fees of (i) a cash fee equal to 6% of the gross proceeds of the offering, as well as a non-accountable expense allowance equal to 1% of the gross proceeds and (ii) warrants to purchase up to an aggregate of 5% of the aggregate number of shares of common stock sold in the offering, or 2,389,600 shares of our common stock (the September 2013 Placement Agent Warrants). The September 2013 Placement Agent Warrants have substantially the same terms as the warrants issued to the purchasers in the offering, except that such warrants have an exercise price of $0.3125 and expire on September 13, 2018.

Table of Contents

ONCOSEC MEDICAL INCORPORATED

PROSPECTUS

Up to 8,440,000 shares of common stock, par value $0.0001 per share

, 2013

Table of Contents

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

Set forth below is an estimate (except for registration fees, which are actual) of the approximate amount of the fees and expenses payable by us in connection with the issuance and distribution of the shares of common stock.

EXPENSE		AMOUNT
Registration Fees	$	1,718
Legal Fees		127,500
Accounting Fees		10,000
Miscellaneous Fees and Expenses		1,000
Total	$	140,218

Item 14. Indemnification of Directors and Officers.

We have not entered into separated indemnification agreements with our directors and officers. Our bylaws provide that we shall indemnify any director or officer to the full extent permitted by law.

Nevada Revised Statutes provide us with the power to indemnify any of our directors, officers, employees and agents:

•a corporation may indemnify any person 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, except an action by or in the right of the corporation, by reason of the fact that he 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, against expenses, including attorneys fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with the action, suit or proceeding if he or she acted in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful;

•a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor 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 against expenses, including amounts paid in settlement and attorneys fees actually and reasonably incurred by him or her in connection with the defense or settlement of the action or suit if he or she acted in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation. Indemnification may not be made for any claim, issue or matter as to which such a person has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals therefrom, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that the court in which the action or suit was brought or other court of competent jurisdiction determines upon application that in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper; and

•to the extent that a director, officer, employee or agent of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding, or in defense of any claim, issue or matter therein, the corporation must indemnify him or her against expenses, including attorneys fees, actually and reasonably incurred by him or her in connection with the defense.

Table of Contents

Nevada Revised Statutes provide that a corporation may make any discretionary indemnification only as authorized in the specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances. The determination must be made:

- by the stockholders of the corporation;
- by the board of directors of the corporation by majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding;
- if a majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding so orders, by independent legal counsel in a written opinion;
- if a quorum consisting of directors who were not parties to the action, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion; or
- by court order.

Nevada Revised Statutes further provide that a corporation may purchase and maintain insurance or make other financial arrangements on behalf of any person who 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 for any liability asserted against him and liability and expenses incurred by him in his capacity as a director, officer, employee or agent, or arising out of his status as such, whether or not the corporation has the authority to indemnify him against such liability and expenses.

Item 15. Recent Sales of Unregistered Securities.

On June 24, 2011, we issued an aggregate of 4,000,000 shares of our common stock and three series of warrants the Series A Warrants, Series B Warrants and Series C Warrants, to purchase an aggregate of 12,000,000 shares of our common stock, pursuant to a securities purchase agreement dated June 21, 2011 (the June 2011 Private Placement). The common stock sold in the June 2011 Private Placement was sold at a purchase price of $0.75 per share. The Series A Warrants have an exercise price of $1.20 per share, are exercisable immediately and have a term of five years. The Series B Warrants had an exercise price of $0.75 per share and a term ranging from eight to sixteen months (unless extended, as provided in such warrants), as provided in the Series B Warrants. The Series C Warrants had an exercise price of $1.20 per share and were exercisable ratably in proportion to each holder s exercise of the Series B Warrants held by such holder. The Series B and Series C Warrants all expired unexercised in February 2012. The purchasers in the June 2011 Private Placement were Capital Ventures International and Hudson Bay Master Fund Ltd. In connection with the June 2011 Private Placement, we also issued to Rodman & Renshaw, LLC and a co-placement agent or their respective designees warrants to purchase up to 240,000 shares of our common stock at an exercise price of $1.20 per share for their services as placement agents. Pursuant to a registration rights agreement entered into with the purchasers in the June 2011 Private Placement, such purchasers are entitled to certain registration rights with respect to the issued shares and the shares underlying the warrants. The securities sold in the June 2011 Private Placement were sold in reliance on the exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof and Rule 506 of Regulation D promulgated thereunder. In determining that the issuance of the securities in the June 2011 Private Placement qualified for an exemption under Section 4(a)(2) and Rule 506 of Regulation D, we relied on the following facts: the securities were offered only to a limited number of large institutional investors and we did not use general solicitation or advertising to market the securities; each investor in the June 2011 Private Placement represented to us that it was an accredited investor (as that term is defined in Rule 501 of Regulation D) and that it was purchasing the securities for its own account and not with a view to distribute them; and the securities issued were restricted securities. We have received net proceeds of approximately $2,790,000 from the June 2011 Private Placement and we could receive additional proceeds of up to approximately $2,120,000 upon the exercise of outstanding Series A Warrants, which have been, or to the extent not received, are expected to be used for working capital purposes and to satisfy certain obligations to Inovio, as is further described under the heading Use of Proceeds , in the prospectus that forms a part of this registration statement.

On May 9, 2011, our Board of Directors authorized the issuance of 200,000 fully vested shares of our common stock to a consultant in exchange for advisory services. The shares were issued pursuant to Section 4(a)(2) of the Securities Act and the rules and regulations promulgated thereunder. The shares were valued at $332,000, based on the closing price of our common stock on the date of issuance.

On March 18, 2011, we closed a private placement of 1,456,000 units at a purchase price of $0.75 per unit for gross proceeds of $1,092,000. Each unit consists of one share of our common stock and one share purchase warrant entitling the holder to acquire one share of common stock at a price of $1.00 per share for a period of five years from the closing of such private placement. We are not obligated to register any of the shares issued or issuable upon exercise of the warrants issued in such private placement. We issued the units to three subscribers, each of whom represented that it was not a U.S. person (as that term is defined in Regulation S of the Securities Act), in an offshore transaction pursuant to Regulation S under the Securities Act. We used $250,000 of the proceeds as the first payment to Inovio pursuant to the Asset Purchase Agreement. We have used the remaining funds for general working capital purposes.

Table of Contents

On September 28, 2011 and March 24, 2012, we issued warrants with an exercise price of $1.20 and $1.00 to purchase 1,000,000 and 3,000,000 shares, respectively, of our common stock to Inovio in consideration for entry into amendments to the Asset Purchase Agreement. The warrants are exercisable immediately upon issuance and have an exercise term of five years. The warrants also contain a mandatory exercise provision allowing us to request the exercise of the warrant in whole provided that our Daily Market Price (as defined in the warrant) is equal to or greater than $2.40 per share for twenty consecutive trading days. The warrant was issued pursuant to an exemption from registration under Section 4(2) of the Securities Act.

Pursuant to a Placement Agent Agreement dated January 23, 2012 by and between the Company and Rodman, as subsequently amended on March 12, 2012, Rodman agreed to act as the Company s placement agent in connection with our March 2012 Public Offering. Under the Placement Agent Agreement, among other things, the Company agreed to issue to Rodman warrants to purchase up to an aggregate of 5% of the aggregate number of shares of common stock sold in the offering, or warrants to purchase 1,550,000 shares of our common stock. Pursuant to the terms of the Placement Agent Agreement, we chose to issue 30% of the Placement Agent Warrants directly to Roth as our financial advisor with respect to the March 2012 Public Offering, in consideration for its financial advisory services. As a result, we issued to Rodman a warrant to purchase 1,085,000 shares of common stock and issued to Roth a warrant to purchase 465,000 shares of common stock. The warrants have an exercise price of $0.3125 per share and expire on March 23, 2017. The warrants issued to Rodman and Roth and the shares of our common stock underlying those warrants have not been registered under the Securities Act and were issued in reliance on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof.

Pursuant to a Placement Agent Agreement dated November 16, 2012, by and between the Company and Dawson James Securities, Inc. (Dawson), Dawson agreed to act as the Company s lead placement agent in connection with our December 2012 Public Offering. Under the Placement Agent Agreement, among other things, the Company agreed to issue to Dawson, or its designees, warrants to purchase up to an aggregate of 5% of the aggregate number of shares of common stock sold in the offering, or warrants to purchase 1,440,000 shares of our common stock. Pursuant to the terms of the Placement Agent Agreement, we chose to issue 50% of the warrants directly to Noble International Investments, Inc., and Burrill LLC (Noble and Burrill , respectively) who acted as our financial advisors with respect to the December 2012 Public Offering, in consideration for their financial advisory services. As a result, we issued to Dawson a warrant to purchase 720,000 shares of common stock and issued to Noble and Burrill a warrant to purchase 360,000 shares of common stock each. The warrants have an exercise price of $0.3125 per share and expire on March 11, 2017. The warrants issued to Dawson, Noble and Burrill and the shares of our common stock underlying those warrants have not been registered under the Securities Act and were issued in reliance on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof.

On December 18, 2012, we issued 150,000 shares of the Company s common stock to the University of South Florida Research Foundation in connection with an agreement to license certain intellectual property to the Company entered into on August 24, 2012. The shares have not been registered under the Securities Act and were issued in reliance on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof.

On August 15, 2013, we issued 500,000 fully vested shares of the Company s common stock to a consultant in exchange for corporate communications services. The shares have not been registered under the Securities Act and were issued in reliance on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof.

Pursuant to a Placement Agent Agreement dated August 16, 2013 by and between the Company and H.C. Wainwright & Co., LLC (Wainwright), as subsequently amended on September 11, 2013, Wainwright agreed to act as the Company s placement agent in connection with our September 2013 Public Offering. Under the Placement Agent Agreement, among other things, the Company agreed to issue to Wainwright warrants to purchase up to an aggregate of 5% of the aggregate number of shares of common stock sold in the offering, or warrants to purchase 2,389,600 shares of our common stock. Pursuant to the terms of the Placement Agent Agreement, we chose to issue 20% of the Placement Agent

Warrants directly to Maxim Group LLC (Maxim) as our financial advisor with respect to the September 2013 Public Offering, in consideration for its financial advisory services. As a result, we issued to Wainwright a warrant to purchase 1,911,680 shares of common stock and issued to Maxim a warrant to purchase 477,920 shares of common stock. The warrants have an exercise price of $0.3125 per share and expire on September 13, 2018. The warrants issued to Wainwright and Maxim and the shares of our common stock underlying those warrants have not been registered under the Securities Act and were issued in reliance on an exemption from the registration requirements of the Securities Act afforded by Section 4(a)(2) thereof.

Table of Contents

Item 16. Exhibits and Financial Statement Schedules

Financial Statement Schedules

All financial statement schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

Exhibits

The following exhibits are being filed with this registration statement on Form S-1.

Exhibit Number	Description of Exhibit
[redacted]	

Table of Contents

10.9	Form of Registration Rights Agreement, dated June 24, 2011, by and among OncoSec Medical Incorporated and the purchasers identified therein (incorporated by reference to our Current Report on Form 8-K, filed on June 27, 2011)
10.10	Placement Agent Agreement between Rodman & Renshaw and OncoSec Medical Incorporated dated June 1, 2011, as amended on June 21, 2011 (incorporated by reference to our Registration Statement on Form S-1/A, filed on October 11, 2011, File No. 333-175779)
10.11	Consulting Agreement between Vista Partners LLC and OncoSec Medical Incorporated dated April 27, 2011, as amended on June 6, 2011 (incorporated by reference to our Registration Statement on Form S-1/A, filed on September 6, 2011, File No. 333-175779)
10.12	Amendment to Asset Purchase Agreement, dated September 28, 2011, by and between OncoSec Medical Incorporated and Inovio Pharmaceuticals, Inc. (incorporated by reference to our Current Report on Form 8-K, filed on October 3, 2011)
10.13	Form of Series A Warrant (incorporated by reference to our Current Report on Form 8-K, filed on June 27, 2011)
10.14	Form of Series B Warrant (incorporated by reference to our Current Report on Form 8-K, filed on June 27, 2011)
10.15	Form of Series C Warrant (incorporated by reference to our Current Report on Form 8-K, filed on June 27, 2011)
10.16	Share Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on October 3, 2011)
10.17	Placement Agent Agreement between Rodman & Renshaw and OncoSec Medical Incorporated dated January 23, 2012 (incorporated by reference to our Registration Statement on Form S-1, filed on January 24, 2012, File No. 333-179146)
10.18	Amendment Agreement to Placement Agent Agreement between Rodman & Renshaw and OncoSec Medical Incorporated, dated March 12, 2012 (incorporated by reference to our Registration Statement on Form S-1/A, filed on March 12, 2012, File No. 333-179146)
10.19	Form of Common Stock Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on March 29, 2012)
10.20	Securities Purchase Agreement, dated March 23, 2012, by and among OncoSec Medical Incorporated and each purchaser identified on the signature pages thereto (incorporated by reference to our Current Report on Form 8-K, filed on March 29, 2012)
10.21	Second Amendment to Asset Purchase Agreement, dated March 24, 2012, by and between OncoSec Medical Incorporated and Inovio Pharmaceuticals, Inc. (incorporated by reference to our Current Report on Form 8-K, filed on March 29, 2012)
10.22	Common Stock Purchase Warrant (issued to Inovio Pharmaceuticals on March 24, 2012) (incorporated by reference to our Current Report on Form 8-K, filed on March 29, 2012)
10.23	Placement Agent Agreement, dated November 16, 2012, between Dawson James Securities, Inc. and OncoSec Medical Incorporated (incorporated by reference to our Registration Statement on Form S-1/A, filed on November 19, 2012, File No. 333-183544)
10.24	Form of Securities Purchase Agreement (incorporated by reference to our Current Report on Form 8-K, filed on December 19, 2012)
10.25	Form of Common Stock Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on December 19, 2012)

Table of Contents

10.26	Standard Industrial Lease, dated May 31, 2013, by and between OncoSec Medical Incorporated and H.G. Fenton Property Company (incorporated by reference to our Current Report on Form 8-K, filed on June 6, 2013)
10.27#	OncoSec Medical Incorporated 2011 Stock Incentive Plan (incorporated by reference to our Registration Statement on Form S-8, filed on August 29, 2011, File No. 333-176537)
10.28#	Amendment No. 1 to the OncoSec Medical Incorporated 2011 Stock Incentive Plan (incorporated by reference to our Registration Statement on Form S-8, filed on May 21, 2013, File No. 333-188726)
10.29	Securities Purchase Agreement, dated September 16, 2013, by and among OncoSec Medical Incorporated and the purchasers party thereto (incorporated by reference to our Current Report on Form 8-K, filed on September 19, 2013)
10.30	Form of Common Stock Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on September 19, 2013)
10.31	Placement Agent Agreement, dated August 16, 2013, by and between OncoSec Medical Incorporated and H.C. Wainwright & Co., LLC (incorporated by reference to our Registration Statement on Form S-1/A, filed on August 16, 2013, File No. 333-189516)
10.32	Amendment to Placement Agent Agreement, dated September 11, 2013, by and between OncoSec Medical Incorporated and H.C. Wainwright & Co., LLC (incorporated by reference to our Annual Report on Form 10-K, filed on September 27, 2013)
21.1	Subsidiaries of the registrant (incorporated by reference to our Registration Statement on Form S-1, filed on July 25, 2011, File No. 333-175779)
23.1	Consent of Independent Registered Public Accounting Firm, Mayer Hoffman McCann P.C. (filed herewith)
23.2	Letter of Consent from McDonald Carano Wilson LLP (included in Exhibit 5.1, previously filed)
24.1	Power of Attorney (previously filed)
101.INS++	XBRL Instant Document
101.SCH++	XBRL Taxonomy Extension Schema Document
101.CAL++	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF++	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB++	XBRL Taxonomy Extension Label Linkbase Document
101.PRE++	XBRL Taxonomy Extension Presentation Linkbase Document

Management contract or compensatory plan or arrangement.

* Confidential treatment has been granted or requested with respect to portions of this exhibit pursuant to Rule 24b-2 of the Exchange Act and these confidential portions have been redacted from the filing that is incorporated by reference. A complete copy of this exhibit, including the redacted terms, has been separately filed with the Securities and Exchange Commission.

++ Previously furnished. In accordance with Regulation S-T, the XBRL-related information in Exhibit 101 to this registration statement on Form S-1 shall be deemed to be furnished and not filed.

Table of Contents

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

(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 Commission 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; and

(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 the 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 that remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act 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 (§ 230.430A of Title 17 of the Code of Federal Regulations), 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.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424 (§230.424 of Title 17 of the Code of Federal Regulations);

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 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

Table of Contents

the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 Act and will be governed by the final adjudication of such issue.

Table of Contents

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this prospectus to be signed on its behalf by the undersigned, thereunto duly authorized.

ONCOSEC MEDICAL INCORPORATED

Date: December 9, 2013

By: /s/ Punit Dhillon
Punit Dhillon
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
/s/ Punit Dhillon Punit Dhillon	President, Chief Executive Officer and Director (*Principal Executive Officer*)	December 9, 2013
/s/ Veronica Vallejo Veronica Vallejo	Chief Financial Officer (*Principal Financial and Accounting Officer*)	December 9, 2013
* Dr. James DeMesa	Director	December 9, 2013
* Dr. Avtar Dhillon	Director	December 9, 2013
* Dr. Anthony Maida, III	Director	December 9, 2013

By: /s/ Punit Dhillon
Punit Dhillon
Attorney-in-Fact

Table of Contents

EXHIBIT INDEX

The following exhibits are being filed with this registration statement on Form S-1.

Exhibit Number	Description of Exhibit
3.1	Certificate of Incorporation of Netventory Solutions, Inc. (incorporated by reference to our Registration Statement on Form S-1, filed on September 3, 2008)
3.2	Amended and Restated Bylaws (incorporated by reference to our Current Report on Form 8-K, filed on March 6, 2012)
3.3	Articles of Merger dated February 9, 2011 (incorporated by reference to our Current Report on Form 8-K, filed on March 3, 2011)
3.4	Certificate of Change dated February 9, 2011 (incorporated by reference to our Current Report on Form 8-K, filed on March 3, 2011)
3.5	Certificate of Correction dated March 9, 2011 (incorporated by reference to our Current Report on Form 8-K, filed on March 14, 2011)
5.1	Opinion of McDonald Carano Wilson LLP (previously filed).
10.1*	Asset Purchase Agreement, dated March 14, 2011, by and between OncoSec Medical Incorporated and Inovio Pharmaceuticals, Inc. (incorporated by reference to our Quarterly Report on Form 10-Q, filed on June 14, 2011)
10.2*	Cross-License Agreement, dated March 24, 2011 by and between OncoSec Medical Incorporated and Inovio Pharmaceuticals, Inc. (incorporated by reference to our Quarterly Report on Form 10-Q, filed on June 14, 2011)
10.3#	Employment Agreement with Punit Dhillon dated May 18, 2011 (incorporated by reference to our Quarterly Report on Form 10-Q, filed on June 14, 2011)
10.4#	Employment Agreement with Veronica Vallejo dated May 18, 2011 (incorporated by reference to our Quarterly Report on Form 10-Q, filed on June 14, 2011)
10.5#	Amendment No.1 to Employment Agreement, dated August 2, 2013, by and between OncoSec Medical Incorporated and Veronica Vallejo (incorporated by reference to our Current Report on Form 8-K, filed on August 8, 2013)
10.6	Form of Private Placement Subscription Agreement (incorporated by reference to our Current Report on Form 8-K, filed on March 24, 2011)
10.7	Form of Share Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on March 24, 2011)
10.8	Securities Purchase Agreement, dated June 21, 2011, by and among OncoSec Medical Incorporated and the purchasers identified therein (incorporated by reference to our Registration Statement on Form S-1/A, filed on September 6, 2011, File No. 333-175779)
10.9	Form of Registration Rights Agreement, dated June 24, 2011, by and among OncoSec Medical Incorporated and the purchasers identified therein (incorporated by reference to our Current Report on Form 8-K, filed on June 27, 2011)
10.10	Placement Agent Agreement between Rodman & Renshaw and OncoSec Medical Incorporated dated June 1, 2011, as amended on June 21, 2011 (incorporated by reference to our Registration Statement on Form S-1/A, filed on October 11, 2011, File No. 333-175779)

Table of Contents

10.11	Consulting Agreement between Vista Partners LLC and OncoSec Medical Incorporated dated April 27, 2011, as amended on June 6, 2011 (incorporated by reference to our Registration Statement on Form S-1/A, filed on September 6, 2011, File No. 333-175779)
10.12	Amendment to Asset Purchase Agreement, dated September 28, 2011, by and between OncoSec Medical Incorporated and Inovio Pharmaceuticals, Inc. (incorporated by reference to our Current Report on Form 8-K, filed on October 3, 2011)
10.13	Form of Series A Warrant (incorporated by reference to our Current Report on Form 8-K, filed on June 27, 2011)
10.14	Form of Series B Warrant (incorporated by reference to our Current Report on Form 8-K, filed on June 27, 2011)
10.15	Form of Series C Warrant (incorporated by reference to our Current Report on Form 8-K, filed on June 27, 2011)
10.16	Share Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on October 3, 2011)
10.17	Placement Agent Agreement between Rodman & Renshaw and OncoSec Medical Incorporated dated January 23, 2012 (incorporated by reference to our Registration Statement on Form S-1, filed on January 24, 2012, File No. 333-179146)
10.18	Amendment Agreement to Placement Agent Agreement between Rodman & Renshaw and OncoSec Medical Incorporated, dated March 12, 2012 (incorporated by reference to our Registration Statement on Form S-1/A, filed on March 12, 2012, File No. 333-179146)
10.19	Form of Common Stock Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on March 29, 2012)
10.20	Securities Purchase Agreement, dated March 23, 2012, by and among OncoSec Medical Incorporated and each purchaser identified on the signature pages thereto (incorporated by reference to our Current Report on Form 8-K, filed on March 29, 2012)
10.21	Second Amendment to Asset Purchase Agreement, dated March 24, 2012, by and between OncoSec Medical Incorporated and Inovio Pharmaceuticals, Inc. (incorporated by reference to our Current Report on Form 8-K, filed on March 29, 2012)
10.22	Common Stock Purchase Warrant (issued to Inovio Pharmaceuticals on March 24, 2012) (incorporated by reference to our Current Report on Form 8-K, filed on March 29, 2012)
10.23	Placement Agent Agreement, dated November 16, 2012, between Dawson James Securities, Inc. and OncoSec Medical Incorporated (incorporated by reference to our Registration Statement on Form S-1/A, filed on November 19, 2012, File No. 333-183544)
10.24	Form of Securities Purchase Agreement (incorporated by reference to our Current Report on Form 8-K, filed on December 19, 2012)
10.25	Form of Common Stock Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on December 19, 2012)
10.26	Standard Industrial Lease, dated May 31, 2013, by and between OncoSec Medical Incorporated and H.G. Fenton Property Company (incorporated by reference to our Current Report on Form 8-K, filed on June 6, 2013)
10.27#	OncoSec Medical Incorporated 2011 Stock Incentive Plan (incorporated by reference to our Registration Statement on Form S-8, filed on August 29, 2011, File No. 333-176537)

Table of Contents

10.28#	Amendment No. 1 to the OncoSec Medical Incorporated 2011 Stock Incentive Plan (incorporated by reference to our Registration Statement on Form S-8, filed on May 21, 2013, File No. 333-188726)
10.29	Securities Purchase Agreement, dated September 16, 2013, by and among OncoSec Medical Incorporated and the purchasers party thereto (incorporated by reference to our Current Report on Form 8-K, filed on September 19, 2013)
10.30	Form of Common Stock Purchase Warrant (incorporated by reference to our Current Report on Form 8-K, filed on September 19, 2013)
10.31	Placement Agent Agreement, dated August 16, 2013, by and between OncoSec Medical Incorporated and H.C. Wainwright & Co., LLC (incorporated by reference to our Registration Statement on Form S-1/A, filed on August 16, 2013, File No. 333-189516)
10.32	Amendment to Placement Agent Agreement, dated September 11, 2013, by and between OncoSec Medical Incorporated and H.C. Wainwright & Co., LLC (incorporated by reference to our Annual Report on Form 10-K, filed on September 27, 2013)
21.1	Subsidiaries of the registrant (incorporated by reference to our Registration Statement on Form S-1, filed on July 25, 2011, File No. 333-175779)
23.1	Consent of Independent Registered Public Accounting Firm, Mayer Hoffman McCann P.C. (filed herewith)
23.2	Letter of Consent from McDonald Carano Wilson LLP (included in Exhibit 5.1, previously filed)
24.1	Power of Attorney (previously filed)
101.INS++	XBRL Instant Document
101.SCH++	XBRL Taxonomy Extension Schema Document
101.CAL++	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF++	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB++	XBRL Taxonomy Extension Label Linkbase Document
101.PRE++	XBRL Taxonomy Extension Presentation Linkbase Document

Management contract or compensatory plan or arrangement.

* Confidential treatment has been granted or requested with respect to portions of this exhibit pursuant to Rule 24b-2 of the Exchange Act and these confidential portions have been redacted from the filing that is incorporated by reference. A complete copy of this exhibit, including the redacted terms, has been separately filed with the Securities and Exchange Commission.

++ Previously furnished. In accordance with Regulation S-T, the XBRL-related information in Exhibit 101 to this registration statement on Form S-1 shall be deemed to be furnished and not filed.