CORTEX PHARMACEUTICALS INC/DE/
Form S-1/A
September 07, 2011
Table of Contents

As filed with the Securities and Exchange Commission on September 7, 2011

Registration No. 333-171788

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 1

TO

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

CORTEX PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware	2834	33-0303583
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

15241 Barranca Parkway

Irvine, California 92618

(949) 727-3157

(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

Mark A. Varney, Ph.D.

President and Chief Executive Officer

Cortex Pharmaceuticals, Inc.

15241 Barranca Parkway

Irvine, California 92618

(949) 727-3157

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Lawrence B. Cohn

Marc G. Alcser

Stradling Yocca Carlson & Rauth

660 Newport Center Drive, Suite 1600

Newport Beach, California 92660

(949) 725-4000

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

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. ¨

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. ¨

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. ¨

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 ¨	Accelerated filer ¨
Non-accelerated filer ¨ (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 SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

Table of Contents

The information in this prospectus is not complete and may be subject to change. We may not sell these securities until the registration statement is filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated September 7, 2011

Prospectus

Cortex Pharmaceuticals, Inc.

15,000,000 Units

Each Consisting of

One Share of Common Stock

and

A Warrant to Purchase One Share of Common Stock

We are offering up to 15,000,000 units, each unit consisting of one share of our common stock and a warrant to purchase one share of our common stock. Subject to certain ownership limitations, each warrant entitles the holder to purchase one share of our common stock at an exercise price of $ per share. The units will not be issued or certificated. The units will separate immediately and the common stock and warrants will be issued separately and will trade separately. We are not required to sell any specific dollar amount or number of units, but will use our best efforts to sell all of the units being offered. This prospectus also relates to the warrants issuable to the placement agent as described below and to the shares of our common stock issuable upon the exercise of those warrants.

You should read this prospectus and any prospectus supplement carefully before you invest. This prospectus contains information you should consider when making your investment decision.

Our common stock is quoted on the OTC Bulletin Board under the symbol CORX.OB . On September 6, 2011, the last reported closing sale price of our common stock was $0.11 per share. We do not intend to apply for listing the warrants on any securities exchange.

Investing in our securities involves a high degree of risk. See Risk Factors beginning on page 4 of this prospectus for certain risks you should consider before purchasing any securities.

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.

Rodman & Renshaw, LLC has agreed to act as our exclusive placement agent in connection with this offering. In addition, the placement agent may engage one or more sub placement agents or selected dealers. The placement agent is not purchasing the securities offered by us, and is not required to sell any specific number or dollar amount of units, but will assist us in this offering on a reasonable best efforts basis. We have agreed to pay the placement agent a cash fee equal to 6% of the gross proceeds of the offering of units. In addition, we have agreed to issue to the placement agent, or its designees, warrants exercisable for a number of shares equal to 6% of the aggregate number of shares, other than shares underlying warrants, included in the units issued in this offering. We estimate the total expenses of this offering, excluding the placement agent fees, will be approximately $120,000. Because there is no minimum offering amount required as a condition to closing in this offering, the actual public offering amount, placement agent fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above. See Plan of Distribution beginning on page 60 of this prospectus for more information on this offering and the placement agent arrangements.

	Per Unit	Maximum Offering Amount
Public offering price	$	$ 1,500,000
Placement Agent fees	$	$ 90,000
Proceeds, before expenses, to us	$	$ 1,410,000

The closing of this offering is subject to certain conditions. We expect that delivery of the units being offered pursuant to this prospectus will be made to purchasers on or about , 2011, against payment in immediately available funds.

The date of this prospectus is , 2011.

Table of Contents

TABLE OF CONTENTS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission. You should only rely on the information in this prospectus or to which we have referred you. Neither the Company nor the placement agent has authorized anyone to provide you with information or to make any representation on behalf of Cortex Pharmaceuticals, Inc. that is different from that contained in this prospectus. You should not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered by this prospectus under the circumstances and in jurisdictions where it is lawful to do so. The information in this prospectus is accurate only as of the date of this prospectus, regardless of the date of delivery of this prospectus or of any sales of these securities. Our business, financial condition, results of operations and prospects may have changed since the date of this prospectus. This prospectus may be used only in jurisdictions were it is legal to sell these securities. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus outside the United States. We are not making any representation to you regarding the legality of an investment in the securities offered hereby under applicable law. You should consult with your own legal advisors as to the legal, tax, business, financial and related aspect of a purchase of such securities.

Industry and Market Data

Unless otherwise indicated, the market data and certain other statistical information used throughout this prospectus are based on independent industry publications, government publications, reports by market research firms or other published independent sources. Although we believe these third-party sources are reliable, we have not independently verified the information. None of the sources cited in this prospectus has consented to the inclusion of any data from its reports, nor have we sought their consent. In addition, some data are based on our good faith estimates. Such estimates are derived from publicly available information released by independent industry analysts and third-party sources, as well as our own management s experience in the industry, and are based on assumptions made by us based on such data and our knowledge of such industry and markets, which we believe to be reasonable. However, none of our estimates have been verified by any independent source. Our estimates and assumptions involve risks and uncertainties and are subject to change based on various factors, including those discussed in the Risk Factors section of this prospectus and the other information contained herein. These and other factors could cause our actual results to differ materially from those expressed in the estimates and assumptions.

Table of Contents

PROSPECTUS SUMMARY

About This Prospectus

This summary highlights the information contained elsewhere in this prospectus. Because this is only a summary, it does not contain all of the information you should consider before buying the securities of the Company. You should read the entire prospectus carefully, especially the sections entitled Caution Regarding Forward Looking Statements, Risk Factors and Management s Discussion and Analysis of Financial Condition and Results of Operations, together with our financial statements and the related notes thereto included elsewhere in this prospectus, before deciding to purchase any securities of the Company.

Unless we state otherwise or the context indicates otherwise, references to Cortex, Company, we, us and our in this prospectus refer to Corte Pharmaceuticals, Inc.

About Cortex Pharmaceuticals

We are engaged in the discovery and development of innovative pharmaceuticals for the treatment of psychiatric disorders and neurological diseases. Our primary focus is to develop novel small molecule compounds that positively modulate AMPA-type glutamate receptors, a complex of proteins involved in the communication between nerve cells in the mammalian brain. These compounds, termed AMPAKINE® compounds, enhance the activity of the AMPA receptor. These molecules are designed and developed as proprietary pharmaceuticals because we believe they hold promise for the treatment of neurological and psychiatric diseases and disorders that are known, or thought, to involve depressed functioning of pathways in the brain that use glutamate as a neurotransmitter. Our most advanced clinical compounds are CX717 and CX1739, both of which are in Phase II clinical development.

The AMPAKINE platform addresses large potential markets. According to research data from IMS Health, in 2008 worldwide sales for central nervous system products to treat brain-related disorders and diseases exceeded $112 billion. Our business plan involves partnering with larger pharmaceutical companies for research, development, clinical testing, manufacturing and global marketing of specific AMPAKINE compounds for those indications that require sizable, expensive Phase III clinical trials and very large sales forces to achieve significant market penetration. Diseases such as Alzheimer s disease, mild cognitive impairment, or MCI, Attention Deficit Hyperactivity Disorder, or ADHD, schizophrenia, depression, respiratory depression caused by opiate analgesics, and sleep apnea may benefit from treatment with AMPAKINE drugs and require a large market presence.

At the same time, we plan to develop compounds internally for a selected set of indications, some of which will allow us to apply for Orphan Drug status. Such designation by the Food and Drug Administration, or the FDA, is usually applied to products where the number of patients in the United States, or the U.S., in the given disease category is typically less than 200,000. The European Medicines Agency adopted a similar system termed The Regulation of Orphan Medicinal Products. These Orphan Drug indications typically require more modest investment in the development stages, follow a quicker regulatory path to approval, and involve a more concentrated and smaller sales force targeted at selected medical centers in the U.S. and Europe. Such Orphan Drug indications that we plan to pursue internally may include Huntington s disease, Fragile X syndrome and Rett s syndrome. If we are successful in the pursuit of this operating strategy, we may be in a position to contain our costs over the next few years, to maintain our focus on the research and early development of novel pharmaceuticals (where we believe that we have the ability to compete) and eventually to participate more fully in the commercial development of AMPAKINE products in the United States.

For a more complete description of our business, please see Business, beginning on page 27.

An investment in the securities of the Company is speculative and involves substantial risks. You should read the Risk Factors section of this prospectus for a discussion of certain factors to consider carefully before deciding to invest in the securities of the Company.

Table of Contents

Corporate Information

Our principal executive offices are located at 15241 Barranca Parkway, Irvine, California 92618, and our telephone number is (949) 727-3157. Our website is http://www.cortexpharm.com.

The contents of our website are not incorporated by reference into this prospectus.

SUMMARY OF THE OFFERING

Securities Offered:	Up to 15,000,000 units. Each unit will consist of one share of our common stock and a warrant to purchase up to one share of our common stock.
Description of Warrants:	The warrants will be exercisable at any time after the date of issuance and ending on the fifth anniversary of the issuance date at an exercise price of $ per share. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the warrants.
Common stock outstanding prior to this offering:	78,858,197 shares.
Common stock to be outstanding after this offering:	93,858,197 shares.
Use of proceeds:	The net proceeds from this offering will be added to our working capital and used to accelerate the development of our AMPAKINE technology, licensing activities, working capital, capital expenditures and other general corporate purposes. Please see Use of Proceeds on page 11.
Risk Factors:	An investment in our securities is speculative and involves substantial risks. You should read the Risk Factors section of this prospectus beginning on page 4 to consider carefully before deciding to invest in our securities.
OTC Bulletin Board Symbol:	CORX.OB

The number of shares of our common stock that will be outstanding immediately after the offering is based on 78,858,197 shares outstanding as of June 30, 2011. Unless we specifically state otherwise, the share information in this prospectus excludes:

- 11,506,756 shares of common stock issuable upon the exercise of stock options outstanding prior to this offering under our equity incentive plans, at a weighted average exercise price of $1.31 per share;

- 3,571,636 shares of common stock available for future grants under our equity incentive plans;

Table of Contents

350,000 shares of common stock issuable upon the exercise of stock options outstanding prior to this offering granted outside of our equity incentive plans, at a weighted average exercise price of $2.59 per share;

3,679 shares of common stock issuable upon the conversion of outstanding Series B convertible preferred stock, at a conversion price of $6.795 per share;

24,126,952 shares of common stock issuable upon the exercise of warrants outstanding prior to this offering, at a weighted average exercise price of $0.74 per share;

15,000,000 shares of common stock issuable upon the exercise of warrants to be issued to purchasers in this offering, at an exercise price of $ per share; and

900,000 shares of common stock issuable upon the exercise of warrants to be issued to the placement agent in connection with this offering, at an exercise price of $ per share.

Table of Contents

RISK FACTORS

Your investment in our securities involves a high degree of risk. You should consider the risks described below and the other information contained in this prospectus carefully before deciding to invest in our securities. If any of the following risks actually occur, our business, financial condition, cash flow and operating results could be harmed. As a result, the trading price of our common stock and the value of the securities offered could decline, and you could lose a part or all of your investment.

Risks Related To Our Business

Our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern.

In its audit opinion issued in connection with our balance sheets as of December 31, 2010 and 2009 and our statements of operations, stockholder s equity (deficit) and comprehensive loss (income), and cash flows for the years ended December 31, 2010 and 2009, our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern given our limited working capital, recurring net losses and negative cash flows from operations. The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities and commitments in the normal course of business. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts of liabilities that might be necessary should we be unable to continue in existence. While we have relied principally in the past on external financing to provide liquidity and capital resources for our operations, we can provide no assurance that cash generated from our operations together with cash received in the future from external financing will be sufficient to enable us to continue as a going concern.

We have a history of net losses; we expect to continue to incur net losses and we may never achieve or maintain profitability.

Since our formation on February 10, 1987 through the end of our most recent fiscal quarter ended June 30, 2011, we have generated only modest operating revenues and we have incurred net losses approximating $116,048,000. For the six months ended June 30, 2011, our net loss was approximately $1,912,000. For the fiscal year ended December 31, 2010, our net income was approximately $1,629,000, due primarily to revenues from our March 2010 sale of select Ampakine assets to Biovail. For the fiscal year ended December 31, 2009, our net loss was approximately $8,441,000. As of June 30, 2011, we had an accumulated deficit of approximately $120,426,000. We have not generated any revenue from product sales to date, and it is possible that we will never generate revenues from product sales in the future. Even if we do achieve significant revenues from product sales, we expect to incur significant operating losses over the next several years. As with other companies in the biotechnology industry, it is possible that we will never achieve profitable operations.

We will need additional capital in the future and, if such capital is not available on terms acceptable to us or available to us at all, we may need to scale back our research and development efforts and may be unable to continue our business operations.

We will require substantial additional funds to advance our research and development programs and to continue our operations, particularly if we decide to independently conduct later-stage clinical testing and apply for regulatory approval of any of our proposed products, and if we decide to independently undertake the marketing and promotion of our products. Additionally, we may require additional funds in the event that we decide to pursue strategic acquisitions of or licenses for other products or businesses. Based on our current operating plan, including planned clinical trials and other product research and development costs, we estimate that our existing cash resources will be sufficient to meet our requirements into the fourth quarter of 2011. We believe that we will require additional capital to fund on-going operations beyond that time. Additional funds may result from agreements with larger pharmaceutical companies that include the license or rights to the technologies and products that we are developing, although there is no assurance that we will secure a transaction in a timely manner, or at all. We may receive another $2,000,000 under our amended and restated agreement with Les Laboratoires Servier, or Servier, if Servier elects to exercise its option on or before October 31, 2011, but there is no assurance that we will receive

Table of Contents

such payment. Additional funds also may result from the exercise of warrants to purchase shares of our common stock. As of June 30, 2011, warrants to purchase up to approximately 24.1 million shares of our common stock were outstanding at exercise prices ranging from $0.21 to $3.96 per share. If these warrants are fully exercised, of which there can be no assurance, such exercise would provide approximately $17,800,000 of additional capital.

Our cash requirements in the future may differ significantly from our current estimates, depending on a number of factors, including:

- the results of our clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the costs of setting up and operating our own marketing and sales organization;
- the ability to obtain funding under contractual and licensing agreements;
- the costs involved in obtaining and enforcing patents or any litigation by third parties regarding intellectual property; and
- our success in entering into collaborative relationships with other parties.

To finance our future activities, we may seek funds through additional rounds of financing, including private or public equity or debt offerings and collaborative arrangements with corporate partners. We cannot say with any certainty that we will be able to obtain the additional needed funds on reasonable terms, or at all. The sale of additional equity or convertible debt securities could result in additional dilution to our stockholders. If we issued preferred equity or debt securities, these securities could have rights superior to holders of our common stock, and such instruments entered into in connection with the issuance of securities could contain covenants that will restrict our operations. We might have to obtain funds through arrangements with collaborative partners or others that may require us to relinquish rights to our technologies, product candidates or products that we otherwise would not relinquish. As previously announced, in early March 2009, we reduced our workforce in an effort to conserve our capital resources. In August 2011, we reduced our workforce from eleven to six full-time employees. If adequate funds are not available in the future, as required, we could lose our key employees and might have to further delay, scale back or eliminate one or more of our research and development programs, which would impair our future prospects. In addition, we may be unable to meet our research spending obligations under our existing licensing agreements and may be unable to continue our business operations.

Our products rely on licenses from research institutions and if we lose access to these technologies or applications, our business would be substantially impaired.

Under our agreements with The Regents of the University of California, we have exclusive rights to AMPAKINE compounds for all applications for which the University has patent rights, other than endocrine modulation.

In connection with our March 2010 transaction with Biovail Laboratories SRL, or Biovail, we consented to The Regents of the University of California providing Biovail a non-exclusive license to the University s patent rights for AMPAKINE compounds for use in the field of respiratory depression or vaso-occlusive crises associated with sickle cell disease. As part of our agreement to reacquire our assets and rights from Biovail in March 2011, the non-exclusive license of these rights to Biovail was terminated and the related rights were returned to us.

Under a patent license agreement with The Governors of the University of Alberta, we had exclusive rights to the use of AMPAKINE compounds to prevent and treat respiratory depression induced by opiate analgesics, barbiturates and anesthetic and sedative agents. In connection with our transaction with Biovail, we assigned our rights under our patent license agreement with the University of Alberta to Biovail. However, we retained our ability to continue to pursue AMPAKINE compounds as a potential treatment for sleep apnea disorders. As part of our

Table of Contents

agreement to reacquire our assets from Biovail in March 2011, the rights assigned to Biovail under our patent license agreement with the University of Alberta were returned to us.

Our rights to certain of the AMPAKINE compounds are secured by patents or patent applications owned wholly by The Regents of the University of California or by the University as a co-owner with us. Our existing agreements with The Regents of the University of California require the University to prepare, file, prosecute and maintain patent applications related to our licensed rights at our expense. Such agreements also require us to make certain minimum annual payments, meet certain milestones or diligently seek to commercialize the underlying technology.

Under such agreements, we are required to make minimum annual royalty payments of approximately $70,000. Separately, we are required to spend a minimum of $250,000 per year to advance the AMPAKINE compounds until we begin marketing an AMPAKINE compound. The commercialization efforts in the agreements require us to file for regulatory approval of an AMPAKINE compound before October 2015.

Although we currently are in compliance with our obligations under the agreements with The Regents of the University of California, including minimum annual payments and diligence milestones, our failure to meet any of these requirements could allow the University to terminate that particular agreement. Management believes that it maintains a strong relationship with The Regents of the University of California.

We are at an early stage of development and we may not be able to successfully develop and commercialize our products and technologies.

The development of AMPAKINE products is subject to the risks of failure commonly experienced in the development of products based upon innovative technologies and the expense and difficulty of obtaining approvals from regulatory agencies. Drug discovery and development is time consuming, expensive and unpredictable. On average, only one out of many thousands of chemical compounds discovered by researchers proves to be both medically effective and safe enough to become an approved medicine. In the fields that we target, approximately one in ten compounds placed in clinical trials generally reaches the market. All of our proposed products are in the preclinical or early clinical stage of development and will require significant additional funding for research, development and clinical testing before we are able to submit them to any of the regulatory agencies for clearances for commercial use. Our trials that are subject to our collaborative research arrangements are being funded by third parties and do not involve financial commitments from us.

The process from discovery to development to regulatory approval can take several years and drug candidates can fail at any stage of the process. Late stage clinical trials often fail to replicate results achieved in earlier studies. Historically, in our industry more than half of all compounds in development failed during Phase II trials and 30% failed during Phase III trials. We cannot assure you that we will be able to complete successfully any of our research and development activities. Even if we do complete them, we may not be able to market successfully any of the products or be able to obtain the necessary regulatory approvals or assure that healthcare providers and payors will accept our products. We also face the risk that any or all of our products will not work as intended or that they will be unsafe, or that, even if they do work and are safe, that our products will be uneconomical to manufacture and market on a large scale. Due to the extended testing and regulatory review process required before we can obtain marketing clearance, we do not expect to be able to commercialize any therapeutic drug for several years, either directly or through our corporate partners or licensees.

We may not be able to enter into the strategic alliances necessary to fully develop and commercialize our products and technologies, and we will be dependent on our corporate partners if we do.

In addition to our agreement with Servier, we are seeking other pharmaceutical company partners to develop other major indications for the AMPAKINE compounds. These agreements would potentially provide us with additional funds in exchange for exclusive or non-exclusive license or other rights to the technologies and products that we are currently developing. Competition between biopharmaceutical companies for these types of arrangements is intense. Although we have been engaged in discussions with candidate companies for some time, we cannot give any assurance that these discussions will result in an agreement or agreements in a timely manner, or

Table of Contents

at all. Additionally, we cannot assure you that any resulting agreement will generate sufficient revenues to offset our operating expenses and longer-term funding requirements.

Risks Related to Our Industry

If we fail to secure adequate intellectual property protection, it could significantly harm our financial results and ability to compete.

Our success will depend, in part, on our ability to get patent protection for our products and processes in the U.S. and elsewhere. We have filed and intend to continue to file patent applications as we need them. However, additional patents that may issue from any of these applications may not be sufficiently broad to protect our technology. Also, any patents issued to us or licensed by us may be designed around or challenged by others, and if such challenge is successful, it may diminish our rights.

If we are unable to obtain sufficient protection of our proprietary rights in our products or processes prior to or after obtaining regulatory clearances, our competitors may be able to obtain regulatory clearance and market competing products by demonstrating the equivalency of their products to our products. If they are successful at demonstrating the equivalency between the products, our competitors would not have to conduct the same lengthy clinical tests that we have conducted.

We also rely on trade secrets and confidential information that we try to protect by entering into confidentiality agreements with other parties. Those confidentiality agreements may be breached, and our remedies may be insufficient to protect the confidential information. Further, our competitors may independently learn our trade secrets or develop similar or superior technologies. To the extent that our consultants, key employees or others apply technological information independently developed by them or by others to our projects, disputes may arise regarding the proprietary rights to such information. We cannot assure you that such disputes will be resolved in our favor.

We may be subject to potential product liability claims. One or more successful claims brought against us could materially impact our business and financial condition.

The clinical testing, manufacturing and marketing of our products may expose us to product liability claims. We maintain liability insurance with coverage limits of $10 million per occurrence and $10 million in the annual aggregate. We have never been subject to a product liability claim, and we require each patient in our clinical trials to sign an informed consent agreement that describes the risks related to the trials, but we cannot assure you that the coverage limits of our insurance policies will be adequate or that one or more successful claims brought against us would not have a material adverse effect on our business, financial condition and result of operations. Further, if one of our AMPAKINE compounds is approved by the FDA for marketing, we cannot assure you that adequate product liability insurance will be available, or if available, that it will be available at a reasonable cost. Any adverse outcome resulting from a product liability claim could have a material adverse effect on our business, financial condition and results of operations.

We face intense competition that could result in products that are superior to the products that we are developing.

Our business is characterized by intensive research efforts. Our competitors include many companies, research institutes and universities that are working in a number of pharmaceutical or biotechnology disciplines to develop therapeutic products similar to those we are currently investigating. For example, the Pharmaceutical Research and Manufacturers of America recently estimated that more than 100 pharmaceutical and biotechnology companies are conducting research in the field of neurological disorders, with over 25 drugs under clinical investigation in the U.S. for the treatment of Alzheimer s disease. Virtually all of the major multinational pharmaceutical companies have active projects in these areas. Most of these competitors have substantially greater financial, technical, manufacturing, marketing, distribution and/or other resources than we do. In addition, many of our competitors have experience in performing human clinical trials of new or improved therapeutic products and obtaining approvals from the FDA and other regulatory agencies. We have no experience in conducting and managing later-stage clinical testing or in preparing applications necessary to obtain regulatory approvals.

Table of Contents

Accordingly, it is possible that our competitors may succeed in developing products that are safer or more effective than those that we are developing and may obtain FDA approvals for their products faster than we can. We expect that competition in this field will continue to intensify.

We may be unable to recruit and retain our senior management and other key technical personnel on whom we are dependent.

We are highly dependent upon senior management and key technical personnel and currently do not carry any insurance policies on such persons. In particular, we are highly dependent on our Executive Chairman, Roger G. Stoll, Ph.D.; our President and Chief Executive Officer, Mark A. Varney, Ph.D.; and our Vice President of Preclinical Development, Steven A. Johnson, Ph.D. all of whom have entered into employment agreements with us. Competition for qualified employees among pharmaceutical and biotechnology companies is intense. The loss of any of our senior management, or our inability to attract, retain and motivate the additional highly-skilled employees and consultants that our business requires, could substantially hurt our business and prospects.

The regulatory approval process is expensive, time consuming, uncertain and may prevent us from obtaining required approvals for the commercialization of some of our products.

The FDA and other similar agencies in foreign countries have substantial requirements for therapeutic products. Such requirements often involve lengthy and detailed laboratory, clinical and post-clinical testing procedures and are expensive to complete. It often takes companies many years to satisfy these requirements, depending on the complexity and novelty of the product. The review process is also extensive, which may delay the approval process even more. According to the Pharmaceutical Research and Manufacturers of America, historically the cost of developing a new pharmaceutical from discovery to approval was approximately $800 million, and this amount is expected to increase annually.

As of yet, we have not obtained any approvals to market our products. Further, we cannot assure you that the FDA or other regulatory agency will grant us approval for any of our products on a timely basis, if at all. Even if regulatory clearances are obtained, a marketed product is subject to continual review, and later discovery of previously unknown problems may result in restrictions on marketing or withdrawal of the product from the market.

Risks Related To Our Securities

Our stock price may be volatile and our common stock could decline in value.

Our common stock is currently quoted on the OTC Bulletin Board and is not actively traded, which may increase price quotation volatility and could limit the liquidity of the common stock, all of which may adversely affect the market price of the common stock and our ability to raise additional capital.

The market price of securities of life sciences companies in general has been very unpredictable. The range of sales prices of our common stock for the fiscal years ended December 31, 2010 and 2009, as quoted on the Over the Counter Bulletin Board and NYSE Amex (formerly The American Stock Exchange), was $0.09 to $0.25 and $0.07 to $0.63, respectively. The following factors, in addition to factors that affect that market generally, could significantly impact our business, and the market price of our common stock could decline:

- competitors announcing technological innovations or new commercial products;
- competitors publicity regarding actual or potential products under development;
- regulatory developments in the U.S. and foreign countries;
- developments concerning proprietary rights, including patent litigation;

public concern over the safety of therapeutic products; and

changes in healthcare reimbursement policies and healthcare regulations.

Table of Contents

You may experience dilution of your ownership interests because of the future issuance of additional shares of our common stock.

As of August 31, 2011, we had approximately 78.9 million shares of our common stock outstanding.

If all warrants and options outstanding as of June 30, 2011 are exercised prior to their expiration, up to approximately 36 million additional shares of our common stock could become freely tradable. Sales of substantial amounts of common stock in the public market, or the perception that such sales could occur, could adversely affect the prevailing market price of our common stock and could also make it more difficult for us to raise funds through future offerings of common stock.

Our charter document and shareholder rights plan may prevent or delay an attempt by our stockholders to replace or remove management.

Certain provisions of our second restated certificate of incorporation could make it more difficult for a third party to acquire control of us, even if such change in control would be beneficial to our stockholders. Our second restated certificate of incorporation allows our Board of Directors, referred to as the Board or Board of Directors, to issue up to 3,507,500 shares of preferred stock without stockholder approval. Pursuant to this authority, in February 2002 our Board of Directors adopted a shareholder rights plan and declared a dividend of a right to purchase one one-thousandth of a share of preferred stock for each outstanding share of our common stock. The ability of our Board of Directors to issue additional preferred stock and our shareholder rights plan may have the effect of delaying or preventing an attempt by our stockholders to replace or remove existing directors and management.

Applicable SEC rules governing the trading of penny stocks limits the trading and liquidity of our common stock which may affect the trading price of our common stock.

Our common stock is currently quoted on the OTC Bulletin Board, and trades below $5.00 per share; therefore, the common stock is considered a penny stock and subject to SEC rules and regulations which impose limitations upon the manner in which such shares may be publicly traded. These regulations require the delivery, before any transaction involving a penny stock, of a disclosure explaining the penny stock market and the associated risks. Under these regulations, certain brokers who recommend such securities to persons other than established customers or certain accredited investors must make a special written suitability determination regarding such purchaser and receive such purchaser s written agreement of a transaction before a sale. In addition, margin regulations prevent low-priced stocks such as ours from being used as collateral for brokers margin loans to investors. These regulations have the effect of limiting the trading activity of our common stock and reducing the liquidity of an investment in our common stock.

We do not expect any cash dividends to be paid on our common stock in the foreseeable future.

We have never declared or paid a cash dividend on our common stock, and we do not anticipate such a declaration or payment for the foreseeable future. We expect to use future earnings, if any, to fund business growth. Consequently, stockholders only opportunity to achieve a return on your investment is if the price of our common stock appreciates and they sell their shares at a profit. We cannot assure stockholders of a positive return on their investment when they sell their shares, nor can we assure that stockholders will not lose the entire amount of their investment.

Risks Related To This Offering

Since we have broad discretion in how we use the proceeds from this offering, we may use the proceeds in ways in which you disagree.

We have not allocated specific amounts of the net proceeds from this offering for any specific purpose. Accordingly, our management will have significant flexibility in applying the net proceeds of this offering. You will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used

Table of Contents

appropriately. It is possible that the net proceeds will be invested in a way that does not yield a favorable, or any, return for us. The failure of our management to use such funds effectively could have a material adverse effect on our business, financial condition, operating results and cash flow.

You will experience immediate and substantial dilution as a result of this offering.

You will incur immediate and substantial dilution as a result of this offering. After giving effect to the sale by us of up to 15,000,000 units offered in this offering at an assumed offering price of $ per unit, and after deducting the placement agent fees and estimated offering expenses payable by us, purchasers in this offering can expect an immediate dilution of $ per share, or %, at the assumed public offering price, assuming no exercise of the warrants. Purchasers exercising their warrants may experience additional dilution. See Dilution on page 14 for a more detailed discussion of the dilution you will incur in this offering.

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 by 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. Without an active market, the liquidity of the warrants will be limited.

Table of Contents

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements contained or incorporated by reference in this prospectus are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, and we intend that such forward-looking statements be subject to the safe harbors created thereby. These statements are based on the current expectations, forecasts, and assumptions of our management and are subject to various risks and uncertainties that could cause our actual results to differ materially from those expressed or implied by the forward-looking statements. Forward-looking statements are sometimes identified by language such as believes, anticipates, estimates, expects, plans, intends, projects, future and similar expressions and may also include references to plans, strategies, objectives, anticipated future performance as well as other statements that are not strictly historical in nature. The risks, uncertainties, and other factors that could cause our actual results to differ materially from those expressed or implied in this prospectus include, but are not limited to, those noted under the caption Risk Factors beginning on page 4 of this prospectus. Readers should carefully review this information as well the risks and other uncertainties described in other filings we may make after the date of this prospectus with the Securities and Exchange Commission.

Readers are cautioned not to place undue reliance on forward-looking statements. They reflect opinions, assumptions, and estimates only as of the date they were made, and we undertake no obligation to publicly update or revise any forward-looking statements in this prospectus, whether as a result of new information, future events or circumstances, or otherwise.

USE OF PROCEEDS

We estimate that the net proceeds of this offering, after deducting placements agent fees and our estimated offering expenses, and excluding the proceeds, if any, from the exercise of the warrants issued in this offering, will be approximately $1,290,000 if we sell the maximum number of units.

We currently intend to use the net proceeds from this offering for working capital and for general corporate purposes, which may include, among other things, funding development of our AMPAKINE technology, licensing activities and capital expenditures.

We cannot estimate precisely the allocation of the net proceeds from this offering among these uses. The amounts and timing of the expenditures may vary significantly, depending on numerous factors, including the progress of our clinical trials and other development efforts as well as the amount of cash used in our operations. Accordingly, our management will have broad discretion in the application of the net proceeds of this offering. We reserve the right to change the use of proceeds as a result of certain contingencies such as competitive developments, opportunities to acquire technologies or products and other factors. Pending the uses described above, we may temporarily invest the net proceeds of this offering in short- and medium-term interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

Table of Contents

MARKET FOR REGISTRANT S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Market Information

Effective December 4, 2009, our common stock began quoting on the Over the Counter Bulletin Board, referred to as OTC Bulletin Board or OTCBB, under the symbol CORX.OB . Prior to that date, our common stock traded on the NYSE Amex (formerly The American Stock Exchange) under the symbol COR . The following table presents quarterly information on the high and low sales prices of the common stock for the interim periods and fiscal years ending December 31, 2011 (through September 6, 2011), December 31, 2010 and December 31, 2009, as furnished by the OTCBB or NYSE Amex, as applicable. The quotations on the OTCBB reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions.

	High	Low
Fiscal Year ending December 31, 2011		
Third Quarter (through September 6, 2011)	$ 0.11	$ 0.05
Second Quarter	0.16	0.06
First Quarter	0.19	0.13
Fiscal Year ended December 31, 2010		
Fourth Quarter	$ 0.21	$ 0.15
Third Quarter	0.18	0.14
Second Quarter	0.24	0.16
First Quarter	0.25	0.09
Fiscal Year ended December 31, 2009		
Fourth Quarter	$ 0.22	$ 0.07
Third Quarter	0.32	0.18
Second Quarter	0.44	0.19
First Quarter	0.63	0.23

The high and low sales prices for our common stock on September 6, 2011, as quoted on the OTCBB, were $0.11 and $0.09, respectively.

Holders

As of August 31, 2011, there were 396 record holders of our common stock, and approximately 8,000 beneficial owners.

Dividends

We have never paid or declared any cash dividends on our common stock. We currently intend to retain any future earnings to finance the growth and development of our business, and we do not expect to pay any cash dividends on our common stock in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our Board of Directors and will depend on our financial condition, results of operations, capital requirements, restrictions under Delaware law and in current or future financing instruments and other factors our Board of Directors deems relevant.

Table of Contents

CAPITALIZATION

The following table sets forth our capitalization as of June 30, 2011:

- on an actual basis; and
- on an as adjusted basis to reflect our sale of the 15,000,000 units offered by us at an assumed public offering price of $ per unit, after deducting estimated placement agent discounts and commissions and estimated offering costs payable by us.

You should read the following table in conjunction with Management s Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and related notes included elsewhere in this prospectus.

	As of June 30, 2011	
	Actual	Pro Forma
	(unaudited)	
	(in thousands, except share data)	
Cash and cash equivalents	$ 1,420	$
Stockholders equity:		
Common stock; $0.001 par value per share; 205,000,000 shares authorized and 78,858,197 issued and outstanding, actual; 205,000,000 shares authorized and 93,858,197 shares issued and outstanding, pro forma as adjusted		