

CORTEX PHARMACEUTICALS INC/DE/

Form S-3

November 26, 2008

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As Filed with the Securities and Exchange Commission on November 26, 2008

Registration No. 333-_____

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3
REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

CORTEX PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

15241 Barranca Parkway, Irvine, California 92618

33-0303583
(I.R.S. Employer Identification No.)

(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)

Copy to:

Lawrence B. Cohn, Esq.

Marc G. Alcser, Esq.

Stradling Yocca Carlson & Rauth,

A Professional Corporation

660 Newport Center Drive, Suite 1600

Newport Beach, California 92660

Approximate date of commencement of proposed sale to the public: **From time to time after the effective date of this Registration Statement.**

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

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, other than securities offered only in connection with dividend or interest reinvestment plans, 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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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 definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

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Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Amount to be Registered ⁽¹⁾ | Proposed | Proposed | Amount of registration fee ⁽⁵⁾ |
|---|---|---|--|--|
| | | maximum offering price per share ⁽¹⁾ | maximum aggregate offering price ⁽¹⁾⁽⁵⁾ | |
| Common Stock (\$0.001 par value) ⁽²⁾⁽³⁾ | | | | |
| Preferred Stock (\$0.001 par value) ⁽²⁾ | | | | |
| Warrants ⁽⁴⁾ | | | | |
| Total | | | \$21,000,000 | \$826 |

- (1) Pursuant to General Instruction II.D of Form S-3, the table lists each class of securities being registered and the aggregate proceeds to be raised in the offering, but does not specify by each class information as to the amount to be registered, the proposed maximum offering price per unit or the proposed maximum aggregate offering price. Any securities registered hereunder for the offering may be sold separately or as units with other securities registered hereunder for the offering. In no event will the aggregate offering price of all securities issued from time to time in the offering pursuant to this registration statement exceed \$21,000,000, inclusive of any exercise price thereof. Pursuant to Rule 416(a) under the Securities Act, the shares being registered hereunder also include such indeterminate number of shares of our common stock and preferred stock as may be issued from time to time with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.
- (2) Subject to note 1 above, there is being registered hereunder an indeterminate number of shares of our common stock and preferred stock as may from time to time be sold hereunder. In addition, pursuant to Rule 457(i) under the Securities Act, the shares being registered hereunder include an indeterminate number of shares of our common stock and preferred stock as may be issued from time to time upon conversion, exercise or exchange of the securities issued directly hereunder. No separate consideration will be received for any shares of our common stock or preferred stock so issued upon conversion or exchange.
- (3) Shares of our common stock being registered hereunder are accompanied by our preferred stock purchase rights described in the Rights Agreement dated February 8, 2002, as amended to date, between us and American Stock Transfer & Trust Company as rights agent. Until the occurrence of certain prescribed events, such rights are not exercisable, are evidenced by each certificate for our common stock and will be transferred along with and only with our common stock.
- (4) Subject to note 1 above, there is being registered hereunder an indeterminate number of warrants to purchase shares of our common stock and/or preferred stock.
- (5) With respect to securities to be sold by us in the offering, the proposed maximum aggregate offering price has been estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act.

Cortex hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until Cortex 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 this registration statement shall become effective on such date as the Commission acting pursuant to said Section 8(a) may determine.

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The information in this prospectus is not complete and may be changed. We may not sell these securities until the Securities and Exchange Commission declares our registration statement effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, dated November 26, 2008

CORTEX PHARMACEUTICALS, INC.

\$21,000,000

Common Stock

Preferred Stock

Warrants

We may, from time to time in one or more offerings, sell up to \$21,000,000 in the aggregate, inclusive of any exercise price thereof, of:

shares of our common stock;

shares of our preferred stock;

warrants to purchase shares of our common stock and/or preferred stock; or

any combination of the foregoing.

We will provide the specific terms of these securities in supplements to this prospectus. The prospectus supplement may also add, update or change information in this prospectus. You should read this prospectus and any prospectus supplement, as well as the documents incorporated by reference or deemed to be incorporated by reference into this prospectus, carefully before you invest. **This prospectus may not be used to offer or sell securities unless accompanied by a prospectus supplement.**

Our principal executive offices are located at 15241 Barranca Parkway, Irvine, California 92618, and our telephone number is (949) 727-3157.

Our common stock is listed on the NYSE Alternext US (formerly the American Stock Exchange) under the symbol COR. Each prospectus supplement will contain information, where applicable, as to any listing on the NYSE Alternext US or any other securities exchange covered by the prospectus supplement.

As of November 25, 2008, the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$23,911,000, based on 47,592,459 shares of outstanding common stock, of which 709,013 shares are held by affiliates, and a per share price of \$0.51 based on the closing sale price of our common stock as quoted on the NYSE Alternext US on November 25, 2008. As of the date hereof we have not offered any securities pursuant to General Instruction I.B.6. of Form S-3 during the prior 12 calendar month period that ends on and includes the date hereof.

Investing in the securities we may offer involves various risks. We strongly recommend that you read carefully the risks we describe in this prospectus as well as in any accompanying prospectus supplement and the risk factors in our most current reports filed with the Securities and Exchange Commission, for a fuller understanding of the risks and uncertainties that we face. See the sections entitled Risk Factors on page 2 and Note Regarding Forward-Looking Statements on page 2.

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.

The date of this prospectus is _____, 2008.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a shelf registration process. Under this shelf registration process, we may offer from time to time up to \$21,000,000 in the aggregate, inclusive of any exercise price thereof, of the following securities:

shares of our common stock;

shares of our preferred stock;

warrants to purchase shares of our common stock and/or preferred stock; or

any combination of the foregoing.

This prospectus provides you with a general description of the securities we may offer. Each time we offer securities, we will provide you with a prospectus supplement that describes the specific amounts, prices and terms of the securities we may offer. The prospectus supplement also may add, update or change information contained in this prospectus. You should read carefully both this prospectus and any prospectus supplement together with additional information described below under **Information Incorporated By Reference**.

This prospectus does not contain all the information provided in the registration statement we filed with the SEC. For further information about us or the securities offered hereby, you should refer to that registration statement, which you can obtain from the SEC as described below under **Where You Can Find More Information**.

You should rely only on the information contained or incorporated by reference in this prospectus or a prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus or any prospectus supplement, as well as information we have previously filed with the SEC and incorporated by reference, is accurate only as of the date on the front of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

We may sell the securities to or through underwriters, dealers or agents or directly to purchasers. We and our agents reserve the sole right to accept or reject in whole or in part any proposed purchase of securities. The prospectus supplement, which we will provide to you each time we offer securities, will set forth the names of any underwriters, dealers or agents involved in the sale of the securities, and any applicable fee, commission or discount arrangements with them. See **Plan of Distribution**.

ABOUT CORTEX PHARMACEUTICALS

In this prospectus, the terms **Cortex**, **the Company**, **we**, **us**, and **our** refer to Cortex Pharmaceuticals, Inc.

Cortex is engaged in the discovery and development of innovative pharmaceuticals for the treatment of psychiatric disorders, neurological diseases and brain mediated breathing disorders. Our primary focus is to develop novel small molecule compounds that positively modulate AMPA-type glutamate receptors, a complex of proteins that is involved in communication between nerve cells in the mammalian brain. We are developing a family of proprietary pharmaceuticals known as AMPAKINE[®] compounds, which enhance the activity of this receptor. We believe that AMPAKINE compounds 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 compound is CX717, which currently is in Phase II clinical development.

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The AMPAKINE platform addresses large potential markets. 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. At the same time, we plan to develop compounds internally for a selected set of indications, many of which will allow us to apply for Orphan Drug status. These 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. 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.

While not an Orphan Drug indication, the acute treatment of respiratory depression represents an additional market that we may potentially pursue internally. However, we will continue to evaluate related partnership opportunities for the indication. We believe that pre-administration of an AMPAKINE compound may prevent opiate-induced respiratory depression, while preserving the opiate's pain relieving effects. As a result, an AMPAKINE compound may improve the safety margin for giving powerful pain relievers following surgical procedures and thereby provide a valuable tool for anesthesiologists and surgeons to optimize pain management in their patients. As we reported in August 2008 and October 2008, two Phase IIa human clinical studies with our AMPAKINE CX717 have demonstrated positive effects on respiratory depression induced by opiates. One of these studies also evaluated the effect of CX717 on the opiate's pain relieving effects. The results from that study demonstrated that the analgesic effects of alfentanil were maintained in two pain models in the presence of CX717.

More comprehensive information about us is available through our Internet website at <http://www.cortexpharm.com>. The information on our website is not incorporated by reference into this prospectus. Our executive offices are located at 15241 Barranca Parkway, Irvine, California 92618, and our telephone number is (949) 727-3157.

RISK FACTORS

Before making an investment decision, you should carefully consider the risks described under Risk Factors in the applicable prospectus supplement and in our most recent Annual Report on Form 10-K, or any updates in our Quarterly Reports on Form 10-Q, together with all of the other information appearing in this prospectus or incorporated by reference into this prospectus and any applicable prospectus supplement, in light of your particular investment objectives and financial circumstances. The risks so described are not the only risks facing our company. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The trading price of our securities could decline due to any of these risks, and you may lose all or part of your investment.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the documents incorporated by reference herein include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Forward-looking statements are those that predict or describe future events or trends and that do not relate solely to historical matters. You can generally identify forward-looking statements as statements containing the words believe, expect, will, anticipate, intend, estimate, project, plan, assume or other similar expressions, or negatives of those expressions, although not all forward-looking statements contain these identifying words. All statements contained or incorporated by reference in this prospectus and any prospectus supplement regarding our future strategy, future operations, projected financial position, estimated future revenues, projected costs, future prospects, the future of our industries and results that might be obtained by pursuing management's current plans and objectives are forward-looking statements.

You should not place undue reliance on our forward-looking statements because the matters they describe are subject to known and unknown risks, uncertainties and other unpredictable factors, many of which are beyond

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our control. Our forward-looking statements are based on the information currently available to us and speak only as of the date on the cover of this prospectus, the date of any prospectus supplement, or, in the case of forward-looking statements incorporated by reference, as of the date of the filing that includes the statement. New risks and uncertainties arise from time to time, and it is impossible for us to predict these matters or how they may affect us. Over time, our actual results, performance or achievements will likely differ from the anticipated results, performance or achievements that are expressed or implied by our forward-looking statements, and such difference might be significant and materially adverse to our security holders. We do not undertake and specifically decline any obligation to update any forward-looking statements or to publicly announce the results of any revisions to any statements to reflect new information or future events or developments.

We have identified some of the important factors that could cause future events to differ from our current expectations and they are described in this prospectus and supplements to this prospectus under the caption **Risk Factors** as well as in our most recent Annual Report on Form 10-K, including without limitation under the captions **Risk Factors**, **Management's Discussion and Analysis of Financial Condition and Results of Operations** and **Quantitative and Qualitative Disclosures About Market Risk**, and in other documents that we may file with the SEC, all of which you should review carefully. Please consider our forward-looking statements in light of those risks as you read this prospectus and any prospectus supplement.

USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds from the sale of our securities offered by us hereby. Except as described in any prospectus supplement, we currently intend to use the net proceeds from the sale of securities offered by us pursuant to this prospectus for working capital, capital expenditures and other general corporate purposes. We may also use such proceeds to fund acquisitions of businesses, technologies or product lines that complement our current business. However, we currently have no commitments or agreements for any specific acquisitions. Pending application of the net proceeds, we intend to invest the net proceeds of the offering of securities by us in investment-grade, interest-bearing securities.

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GENERAL DESCRIPTION OF SECURITIES

We, directly or through agents, dealers or underwriters designated from time to time, may offer, issue and sell, together or separately, in one or more offerings, up to \$21,000,000 in the aggregate, inclusive of any exercise price thereof, of:

shares of our common stock, par value \$0.001 per share;

shares of our preferred stock, par value \$0.001 per share;

warrants to purchase shares of our common stock and/or preferred stock; or

any combination of the foregoing, either individually or as units consisting of one or more of the foregoing, each on terms to be determined at the time of sale.

The common stock, the preferred stock and the warrants are collectively referred to herein as the securities. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities, we will provide you with a prospectus supplement that describes the specific amounts, prices and terms of the securities we offer. The securities involve various risks that we will describe in the section entitled "Risk Factors" that will be included in each prospectus supplement.

DESCRIPTION OF CAPITAL STOCK

Common Stock

We have authority under our restated certificate of incorporation, as amended, to issue up to 105,000,000 shares of our common stock, par value \$0.001 per share. As of November 25, 2008, there were 47,592,459 shares of our common stock issued and outstanding.

Holders of shares of our common stock are entitled to one vote per share held of record on all matters submitted to a vote of stockholders, including the election of directors. The holders are entitled to receive dividends when, as and if declared by our board of directors, in its discretion, out of funds legally available therefor, subject to preferences that may be applicable to any outstanding shares of our preferred stock. In the event of our liquidation, dissolution or winding up, the holders of our common stock are entitled to share ratably in all of our assets remaining after payment of liabilities and after payment of any preferential amounts to which holders of shares of any series of our preferred stock that may be outstanding in the future, may be entitled. The holders of our common stock have no preemptive or other subscription rights, and there are no conversion rights or redemption or sinking fund provisions with respect to such shares. All of the outstanding shares of our common stock are, and the shares of our common stock when issued will be, fully paid and nonassessable.

Preferred Stock

We have authority under our restated certificate of incorporation, as amended, to issue up to 5,000,000 shares of our preferred stock, par value \$0.001 per share, of which (i) 1,250,000 shares have been designated as 9% cumulative convertible preferred stock, (ii) 3,200,000 shares have been designated as Series B convertible preferred stock, (iii) 500 shares have been designated as Series D convertible preferred stock and (iv) 35,000 shares have been designated as Series A junior participating preferred stock, as described in "Description of Capital Stock-Stockholder Rights Plan." The remaining 514,500 shares of preferred stock are presently undesignated. As of November 25, 2008, there were 37,500 shares of our Series B convertible preferred stock issued and outstanding. As of such date, there were no other shares of our preferred stock issued and outstanding.

Our board of directors may from time to time issue the undesignated preferred stock in one or more series and, in connection with the creation of each such series, fix the number of shares of such series and the designations, powers, preferences, rights, qualifications, limitations, and restrictions of such series, to the fullest extent permitted under the Delaware General Corporation Law. Any preferred stock issued by us in the future may decrease the

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amount of earnings and assets available for distribution to holders of our common stock or adversely affect the rights and power, including voting rights, of the holders of our common stock without any further vote or action by our stockholders. In addition, the rights of holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued by us in the future.

Stockholder Rights Plan

On February 5, 2002, our board of directors approved the adoption of a stockholder rights plan and declared a divided distribution of one right for each outstanding share of our common stock on February 15, 2002. Each share of our common stock presently issued and outstanding includes one right and each share of our common stock that may be issued after the date hereof will also include one right. The rights automatically attach to outstanding shares of our common stock and no separate certificates are issued. The rights trade only together with shares of our common stock.

Each right allows its holder to purchase a unit consisting of one one-thousandth of a share of our Series A junior participating preferred stock at a purchase price of \$75.00 per unit, subject to adjustment. The rights are not currently exercisable, but will become exercisable upon the earlier of (i) 10 days following a public announcement that a person or group of affiliated or associated persons has acquired, or obtained the right to acquire, beneficial ownership of 15% or more of our outstanding common stock or (ii) 10 business days following the commencement of a tender offer or exchange offer that would result in a person or group beneficially owning 15% or more of our outstanding common stock. Once the rights become exercisable, each holder of a right may purchase shares of our common stock, or, under certain circumstances, shares of the common stock of the acquiring person or group, having a value equal to two times the exercise price of the right.

Our board of directors may redeem the rights in whole, at a redemption price of \$0.001 per right, at any time until 10 days following the acquisition of 15% or more of our outstanding common stock by a person or group. Unless earlier redeemed or exchanged by us, the rights will expire on February 15, 2012.

DESCRIPTION OF THE WARRANTS

We may issue warrants to purchase shares of our common stock and/or our preferred stock. The warrants may be issued independently or together with shares of our common stock and/or our preferred stock and may be attached to or separate from the shares of our common stock and/or our preferred stock. The warrants are to be issued under warrant agreements to be entered into between us and/or a bank or trust company, as warrant agent, all as shall be set forth in the prospectus supplement relating to warrants being offered pursuant to such prospectus supplement. The following description of the warrants will apply to the warrants offered by this prospectus unless we provide otherwise in the applicable prospectus supplement. The applicable prospectus supplement for a particular series of warrants may specify different or additional terms.

Warrants

The applicable prospectus supplement will describe the following terms of warrants offered:

the title of the warrants;

the securities for which the warrants are exercisable;

the price or prices at which the warrants will be issued;

the provisions, if any, for changes to or adjustments in the exercise price;

the provisions, if any, for call rights or put rights relating to the warrants or the underlying securities;

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the date on which the right to exercise the warrants shall commence and the date on which the right will expire;

if applicable, the number of warrants issued with each share of our common stock and/or our preferred stock;

if applicable, the date on and after which the warrants and the related common stock and/or preferred stock will be separately transferable;

a discussion of any material federal income tax consequences of holding or exercising the warrants; and

any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants. Holders of warrants will not be entitled, by virtue of being such holders, to vote, consent, receive dividends, receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter, or to exercise any rights whatsoever as our stockholders.

The exercise price payable and the number of shares of our common stock and/or our preferred stock purchasable upon the exercise of each warrant will be subject to adjustment in certain events, including the issuance of a stock dividend to holders of our common stock and/or our preferred stock or a stock split, reverse stock split, combination, subdivision or reclassification of our common stock and/or our preferred stock. In lieu of adjusting the number of shares of our common stock and/or our preferred stock purchasable upon exercise of each warrant, we may elect to adjust the number of warrants. No fractional shares will be issued upon exercise of the warrants, but we will pay the cash value of any fractional shares otherwise issuable. Notwithstanding the foregoing, in case of any consolidation, merger, or sale or conveyance of our property as an entirety or substantially as an entirety, the holder of each outstanding warrant shall have the right to the kind and amount of shares of stock and other securities and property, including cash, receivable by a holder of the number of shares of our common stock and/or our preferred stock into which the warrant was exercisable immediately prior to such transaction.

Exercise of Warrants

Each warrant will entitle the holder to purchase for cash such shares of our common stock and/or our preferred stock at such exercise price as shall in each case be set forth in, or be determinable as set forth in, the prospectus supplement relating to the warrants offered thereby. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the prospectus supplement relating to the warrants offered thereby. After the close of business on the expiration date, unexercised warrants will become void.

The warrants may be exercised as set forth in the prospectus supplement relating to the warrants offered. Upon receipt of payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the shares of our common stock and/or our preferred stock purchasable upon such exercise. If less than all of the warrants represented by such warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

PLAN OF DISTRIBUTION

We may sell the securities through underwriters or dealers, through agents, or directly to one or more purchasers or through a combination of these methods. The applicable prospectus supplement will describe the terms of the offering of the securities, including:

the name or names of any underwriters, if any, and if required, any dealers or agents;

the purchase price of the securities and the proceeds we will receive from the sale;

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any underwriting discounts and other items constituting underwriters' compensation;

any discounts or concessions allowed or reallocated or paid to dealers; and

any securities exchange or market on which the securities may be listed.

We may distribute the securities from time to time in one or more transactions at:

at fixed price or prices, which may be changed from time to time;

market prices prevailing at the time of sale;

prices related to such prevailing market prices; or

negotiated prices.

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If we use underwriters in the sale of securities, they will acquire the securities for their own account and may resell them from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may change from time to time.

If we use a dealer in the sale of the securities being offered pursuant to this prospectus, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

In connection with the sale of the securities, underwriters, dealers or agents may receive compensation from us or from purchasers of the securities for whom they act as agents, in the form of discounts, concessions or commissions. Underwriters may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of the securities, and any institutional investors or others that purchase securities directly and then resell the securities, may be deemed to be underwriters, and any discounts or commissions received by them from us and any profit on the resale of the securities by them may be deemed to be underwriting discounts and commissions under the Securities Act.

We may provide agents and underwriters with indemnification against particular civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to such liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

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In addition, we may enter into derivative transactions with third parties (including the writing of options), or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with such a transaction, the third parties may, pursuant to this prospectus and the applicable prospectus supplement, sell securities covered by this prospectus and the applicable prospectus supplement. If so, the third party may use securities borrowed from us or others to settle such sales and may use securities received from us to close out any related short positions. We may also loan or pledge securities covered by this prospectus and the applicable prospectus supplement to third parties, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement or in a post-effective amendment.

All securities we offer other than common stock will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Underwriters may engage in stabilizing and syndicate covering transactions in accordance with Rule 104 under the Exchange Act. Rule 104 permits stabilizing bids to purchase the securities being offered as long as the stabilizing bids do not exceed a specified maximum. Underwriters may over-allot the offered securities in connection with the offering, thus creating a short position in their account. Syndicate covering transactions involve purchases of the offered securities by underwriters in the open market after the distribution has been completed in order to cover syndicate short positions. Underwriters may also cover an over-allotment or short position by exercising their over-allotment option, if any. Stabilizing and syndicate covering transactions may cause the price of the offered securities to be higher than it would otherwise be in the absence of these transactions. These transactions, if commenced, may be discontinued at any time.

LEGAL MATTERS

The validity of the securities being offered hereby will be passed on by Stradling Yocca Carlson & Rauth, a Professional Corporation, Newport Beach, California.

EXPERTS

Haskell & White LLP, independent registered public accounting firm, has audited our balance sheets as of December 31, 2007 and December 31, 2006, and related statements of operations, stockholders' equity and cash flows for each of the years in the three-year period ended December 31, 2007, included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2007, and the effectiveness of our internal control over financial reporting as of December 31, 2007, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements and management's assessment are incorporated by reference in reliance on Haskell & White LLP's report, given on the authority of said firm as experts in accounting and auditing.

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WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed a registration statement on Form S-3 with the SEC relating to the common stock, the preferred stock and the warrants offered by this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. We have omitted parts of the registration statement, as permitted by the rules and regulations of the SEC. Statements contained in this prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance reference is made to the copy of such contract or other document filed as an exhibit to the registration statement, each such statement being qualified in all respects by such reference. For further information with respect to us and the common stock, the preferred stock and the warrants offered hereby, reference is made to such registration statement, exhibits and schedules.

We are subject to the information and periodic reporting requirements of the Exchange Act, and in accordance therewith file periodic reports, current reports, proxy statements and other information with the SEC. Such periodic reports, current reports, proxy statements, other information and a copy of the registration statement on Form S-3 may be inspected by anyone without charge and copies of these materials may be obtained upon the payment of the fees prescribed by the SEC, at the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The registration statement on Form S-3 and the periodic reports, current reports, proxy statements and other information filed by us are also available through the Internet web site maintained by the SEC at the following address: <http://www.sec.gov>.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus the information we file with it. This means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is considered to be a part of this prospectus, and later information we file with the SEC will automatically update and supersede this information. The following documents filed with the SEC (in each case, Commission File No. 1-16467) are incorporated by reference in this prospectus:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2007, filed with the SEC on March 17, 2008;

our Quarterly Report on Form 10-Q for the quarter ended March 31, 2008, filed with the SEC on May 8, 2008;

our Quarterly Report on Form 10-Q for the quarter ended June 30, 2008, filed with the SEC on August 11, 2008;

our Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, filed with the SEC on November 7, 2008;

our Current Report on Form 8-K dated May 14, 2008, filed with the SEC on May 19, 2008;

our Current Report on Form 8-K dated May 30, 2008, filed with the SEC on June 3, 2008;

our Current Report on Form 8-K dated June 6, 2008, filed with the SEC on June 10, 2008;

our Current Report on Form 8-K dated July 11, 2008, filed with the SEC on July 17, 2008;

our definitive Proxy Statement dated April 10, 2008, filed with the SEC on April 10, 2008 in connection with our 2008 Annual Meeting of Stockholders;

the description of our common stock contained in our Registration Statement on Form 8-A, filed with the SEC under Section 12(b) of the Exchange Act on May 2, 2001, including any amendment or report filed for the purpose of updating such description; and

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the description of our preferred stock purchase rights contained in our Registration Statement on Form 8-A/A, filed with the SEC under Section 12(b) of the Exchange Act on February 15, 2002, including any amendment or report filed for the purpose of updating such description.

We are also incorporating by reference any future filings we make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act until this offering is completed, including those made between the date of filing of the initial registration statement and prior to effectiveness of the registration statement, except for information furnished under Item 2.02 or Item 7.01 of our Current Reports on Form 8-K which is not deemed to be filed and not incorporated by reference herein.

You may request a copy of these filings (other than an exhibit to a filing unless that exhibit is specifically incorporated by reference into that filing), at no cost, by writing or calling us at Cortex Pharmaceuticals, Inc., 15241 Barranca Parkway, Irvine, California 92618, telephone number (949) 727-3157, Attention: Chief Financial Officer.

Table of Contents**PART II****INFORMATION NOT REQUIRED IN PROSPECTUS****Item 14. Other Expenses of Issuance and Distribution.**

The following table sets forth the costs and expenses, other than underwriting discounts, payable by the registrant in connection with the offering of the securities being registered. All of the amounts shown are estimates except for the SEC registration fee.

| | |
|------------------------------|-------------------|
| SEC registration fees | \$ 826 |
| Printing fees and expenses | \$ 2,500 |
| Transfer Agent fees | \$ 2,500 |
| Legal fees and expenses | \$ 75,000 |
| Accounting fees and expenses | \$ 25,000 |
| Miscellaneous expenses | \$ 3,000 |
| Total | \$ 108,826 |

Item 15. Indemnification of Directors and Officers.

Section 102(b)(7) of the Delaware General Corporation Law, or the DGCL, enables a corporation in its original certificate of incorporation or an amendment thereto to eliminate or limit the personal liability of a director to the corporation or its stockholders for monetary damages for breach of the director's fiduciary duty, except (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) pursuant to Section 174 of the DGCL (providing for liability of directors for unlawful payment of dividends or unlawful stock purchases or redemptions) or (iv) for any transaction from which the director derived an improper personal benefit.

Section 145(a) of the DGCL empowers a corporation to indemnify any present or former director, officer, employee or agent of the corporation, or any individual who served or is serving at the corporation's request as a director, officer, employee or agent of another organization, 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 (other than an action by or in the right of the corporation), against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding provided that such director, officer, employee or agent acted in good faith and in a manner 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, provided further that such director, officer, employee or agent had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the DGCL empowers a corporation to indemnify any present or former director, officer, employee or agent of the corporation, or any individual who served or is serving at the corporation's request as a director, officer, employee or agent of another corporation, 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 such person acted in any of the capacities set forth above, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit provided that such director, officer, employee or agent acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification may be made in respect of any claim, issue or matter as to which such director, officer, employee or agent shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all of the circumstances of the case, such director or officer is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

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Section 145 of the DGCL further provides that (i) to the extent a present or former director or officer has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in subsections (a) and (b) of Section 145 of the DGCL, or in the defense of any claim, issue or matter therein, he or she shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection therewith; (ii) the indemnification and advancement of expenses provided for, by, or granted pursuant to, Section 145 of the DGCL shall not be deemed exclusive of any other rights to which the persons seeking indemnification may be entitled; and (iii) the corporation is empowered to purchase and maintain insurance on behalf of a present or former director, officer, employee or agent of the corporation, or any individual who is or was serving at the corporation's request as a director, officer or employee of another organization, against any liability asserted against him or her or incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liabilities under Section 145 of the DGCL.

As permitted by the DGCL, our restated certificate of incorporation, as amended, eliminates the liability of our directors to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except to the extent otherwise prohibited by the DGCL.

Our restated certificate of incorporation, as amended, provides that we will indemnify each person who was or is made a party to any proceeding by reason of the fact that such person is or was our director or officer against all expense, liability and loss reasonably incurred or suffered by such person in connection therewith to the fullest extent authorized by the DGCL.

Our restated certificate of incorporation, as amended, also gives us the ability to enter into indemnification agreements with each of our directors and officers. We have entered into such indemnification agreements with each of our directors and executive officers. The indemnification agreements provide for the indemnification of our directors and executive officers against any and all expenses, judgments, fines, penalties and amounts paid in settlement, to the fullest extent permitted by law.

Item 16. Exhibits.

| Exhibit Number | Description |
|-----------------------|---|
| 1.1* | Form of Underwriting Agreement, if any. |
| 3.1 | Restated Certificate of Incorporation dated April 11, 1989, as amended by Certificate of Amendment on June 27, 1989, by Certificate of Designation filed April 29, 1991, by Certificate of Correction filed May 1, 1991, by Certificate of Amendment of Certificate of Designation filed June 13, 1991, by Certificate of Amendment of Certificate of Incorporation filed November 12, 1992, by Certificate of Amendment of Restated Certificate of Incorporation filed January 11, 1995, by Certificate of Designation filed December 8, 1995, by Certificate of Designation filed October 15, 1996, by Certificate of Designation filed June 4, 1997, by Certificate of Amendment of Restated Certificate of Incorporation filed December 21, 1998, and by Certificate of Designation filed February 11, 2002, incorporated by reference to the same numbered Exhibit of the Company's Amendment No. 1 to Registration Statement on Form 8-A, No.001-16467, filed February 15, 2002, as further amended by Certificate of Amendment of Restated Certificate of Incorporation filed December 15, 2003, incorporated by reference to Exhibit 3.3 to the Company's Quarterly Report on Form 10-Q filed February 12, 2004, as further amended by Certificate of Amendment of Restated Certificate of Incorporation filed March 2, 2006, incorporated by reference to Exhibit 3.4 to the Company's Annual Report on Form 10-K filed March 16, 2006, as further amended by Certificate of Amendment of Restated Certificate of Incorporation filed May 15, 2008, incorporated by reference to Exhibit 3.6 to the Company's Current Report on Form 8-K filed May 19, 2008. |
| 3.2 | By-Laws of the Company, as adopted March 4, 1987, and amended on October 8, 1996, incorporated by reference to the same numbered Exhibit to the Company's Annual Report on Form 10-KSB filed October 15, 1996, as further amended by Certificate of Amendment of By-Laws, incorporated by reference to the Exhibit 3.5 to the Company's Current Report on Form 8-K filed November 15, 2007. |
| 4.1 | Specimen Form of Stock Certificate for Common Stock, incorporated by reference to the same-numbered Exhibit to the Company's Registration Statement on Form 8-A, No. 001-16467, filed May 2, 2001. |
| 4.2* | Form of Warrant Agreement, if any, including form of Warrant. |
| 4.3 | Rights Agreement, dated as of February 8, 2002, between the Company and American Stock Transfer & Trust Company, which includes as Exhibit A thereto a form of Certificate of Designation for the Series A Junior Participating Preferred Stock, as Exhibit B thereto the Form of Rights Certificate and as Exhibit C thereto a Summary of Terms of Stockholder Rights Plan, |

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incorporated by reference to Exhibit 4.2 to the Company's Amendment No. 1 to Registration Statement on Form 8-A, No. 001-16467, filed February 15, 2002.

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- 5.1 Opinion of Stradling Yocca Carlson & Rauth, a Professional Corporation.
- 23.1 Consent of Haskell & White LLP, independent registered public accounting firm.
- 23.2 Consent of Stradling Yocca Carlson & Rauth, a Professional Corporation (included in its opinion filed as Exhibit 5.1 hereto).
- 24.1 Power of Attorney (included on signature page).

* To be filed by an amendment to the registration statement or as an exhibit to a Current Report on Form 8-K under the Exchange Act, subsequent to effectiveness, if necessary.

Item 17. Undertakings.

(a) 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;

(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;

Provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the registrant is relying on Rule 430B:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

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(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *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 effective date, 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 effective date.

(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;

(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.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934), that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) 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 the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act of 1933 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,

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officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

(d) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

Table of Contents**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Irvine, State of California, on November 26, 2008.

CORTEX PHARMACEUTICALS, INC.

By: /s/ Maria S. Messinger
Chief Financial Officer
(Principal Financial and Accounting Officer)

POWER OF ATTORNEY

We, the undersigned directors and officers of Cortex Pharmaceuticals, Inc., do hereby constitute and appoint Roger G. Stoll Ph.D., Mark A. Varney, Ph.D. and Maria S. Messinger, or any of them, our true and lawful attorneys and agents, to do any and all acts and things in our name and behalf in our capacities as directors and officers and to execute any and all instruments for us and in our names in the capacities indicated below, which said attorneys and agents, or any of them, may deem necessary or advisable to enable said corporation to comply with the Securities Act of 1933, as amended, and any rules, regulations, and requirements of the Securities and Exchange Commission, in connection with this registration statement, including specifically, but without limitation, power and authority to sign for us or any of us in our names and in the capacities indicated below, any and all amendments (including post-effective amendments) to this registration statement, or any related registration statement that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended; and we do hereby ratify and confirm all that the said attorneys and agents, or any of them, shall do or cause to be done by virtue hereof.

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

| Signature | Title | Date |
|---------------------------|---|-------------------|
| /s/ Mark A. Varney, Ph.D. | President, Chief Executive Officer and Director | November 26, 2008 |
| Mark A. Varney, Ph.D. | (Principal Executive Officer) | |
| /s/ Maria S. Messinger | Chief Financial Officer | November 26, 2008 |
| Maria S. Messinger | (Principal Financial and Accounting Officer) | |
| /s/ Robert F. Allnutt | Director | November 26, 2008 |
| Robert F. Allnutt | | |
| /s/ John F. Benedik | Director | November 26, 2008 |
| John F. Benedik | | |
| /s/ Charles J. Casamento | Director | November 26, 2008 |
| Charles J. Casamento | | |
| /s/ Carl W. Cotman, Ph.D. | Director | November 26, 2008 |

Carl W. Cotman, Ph.D.

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| Signature | Title | Date |
|--|--|-------------------|
| /s/ Peter F. Drake, Ph.D. Peter F. Drake, Ph.D. | Director | November 26, 2008 |
| /s/ M. Ross Johnson, Ph.D. M. Ross Johnson, Ph.D. | Director | November 26, 2008 |
| /s/ Roger G. Stoll, Ph.D. Roger G. Stoll, Ph.D. | Executive Chairman of the Board of Directors | November 26, 2008 |
| /s/ Gary D. Tollefson, M.D., Ph.D. Gary D. Tollefson, M.D., Ph.D. | Director | November 26, 2008 |

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EXHIBIT INDEX

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| 23.1 | Consent of Haskell & White LLP, independent registered public accounting firm. |
| 23.2 | Consent of Stradling Yocca Carlson & Rauth, a Professional Corporation (included in its opinion filed as Exhibit 5.1 hereto). |
| 24.1 | Power of Attorney (included on signature page). |

* To be filed by an amendment to the registration statement or as an exhibit to a Current Report on Form 8-K under the Exchange Act, subsequent to effectiveness, if necessary.