

CHELSEA THERAPEUTICS INTERNATIONAL, LTD.

FORM S-3

(Securities Registration Statement (simplified form))

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Address	3530 TORINGDON WAY SUITE 200 CHARLOTTE, NC 28277
Telephone	704-341-1516
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SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CHELSEA THERAPEUTICS INTERNATIONAL, LTD.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation or organization)

20-3174202
(I.R.S. Employer
Identification No.)

3530 Toringdon Way, Suite 200
Charlotte, North Carolina 28277
Telephone: (704) 341-1516

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

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

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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(c) under the Securities Act, check the following box.

If this Form is a post-effective amendment 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 the definitions of "accelerated filer", "large accelerated filer" and "smaller reporting company" (as defined in Rule 12b-2 of the Act) (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer
(Do not check if smaller reporting company)

Smaller reporting company

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CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered(1)	Proposed maximum aggregate offering price per unit (2)	Proposed maximum aggregate offering price(2)	Amount of registration fee(3)
Common stock, \$0.0001 par value per share	\$ —	\$—	\$ —	\$ —
Preferred stock, \$0.0001 par value per share	—	—	—	—
Warrants	—	—	—	—
Debt Securities	—	—	—	—
Units	—	—	—	—
Total	\$60,000,000		\$60,000,000	\$3,348

- (1) There are being registered hereunder such indeterminate number of shares of common stock and preferred stock, such indeterminate principal amount of debt securities, such indeterminate number of warrants to purchase common stock, preferred stock or debt securities, and such indeterminate number of units as shall have an aggregate initial offering price not to exceed \$60,000,000, less the aggregate dollar amount of all securities previously issued hereunder. If any debt securities are issued at an original issued discount, then the offering price of such debt securities shall be in such greater principal amount as shall result in an aggregate offering price not to exceed \$60,000,000, less the aggregate dollar amount of all securities previously issued hereunder. Any securities registered hereunder may be sold separately or as units with the other securities registered hereunder. The proposed maximum offering price per unit will be determined, from time to time, by the Registrant in connection with the issuance by the Registrant of the securities registered hereunder. The securities registered hereunder also include such indeterminate number of shares of common stock and preferred stock and amount of debt securities as may be issued upon conversion of or exchange for preferred stock or debt securities that provide for conversion or exchange, upon exercise of warrants or pursuant to the antidilution provisions of any of such securities. In addition, pursuant to Rule 416 under the Securities Act, the shares being registered hereunder include such indeterminate number of shares of common stock and preferred stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.
- (2) The proposed maximum offering price per unit will be determined from time to time by the Registrant in connection with, and at the time of, the issuance of the securities and is not specified as to each class of security pursuant to General Instruction II.D. of Form S-3, as amended.
- (3) Calculated pursuant to Rule 457(o) under the Securities Act of 1933, as amended, based on the proposed maximum aggregate offering price of all securities listed.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

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

Subject to completion, dated August 10, 2009

Prospectus



\$60,000,000
Common Stock
Preferred Stock
Warrants
Debt Securities
Units

From time to time, we may offer up to \$60,000,000 of any combination of the securities described in this prospectus, either individually or in units, in one or more offerings in amounts, at prices and on the terms that we will determine at the time of offering. We may also offer common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants.

Each time we sell securities, we will provide specific terms of the securities offered in a supplement to this prospectus. The prospectus supplement may also add, update or change information contained in this prospectus. We will specify in any accompanying prospectus supplement the terms of any offering. You should read this prospectus and the applicable prospectus supplement, as well as any documents incorporated by reference in this prospectus and any prospectus supplement, carefully before you invest in any securities. **This prospectus may not be used to consummate a sale of securities unless accompanied by the applicable prospectus supplement.**

We will sell these securities directly to our stockholders or to other purchasers or through agents on our behalf or through underwriters or dealers as designated from time to time. If any agents or underwriters are involved in the sale of any of these securities, the applicable prospectus supplement will provide the names of the agents or underwriters and any applicable fees, commissions or discounts.

Our common stock trades on the NASDAQ Capital Market under the trading symbol "CHTP." On August 7, 2009, the last reported sale price of our common stock was \$4.68 per share. We recommend that you obtain current market quotations for our common stock prior to making an investment decision.

You are urged to carefully read this prospectus, the prospectus supplement relating to any specific offering of securities and all information incorporated by reference herein and therein.

Investing in our securities involves a high degree of risk. These risks are discussed in this prospectus under "Risk Factors" beginning on page 6 and in the documents incorporated by reference into this prospectus.

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 [_____], 2009.

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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 SEC, utilizing a “shelf” registration process. Under this shelf registration process, we may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, in one or more offerings, up to a total dollar amount of \$60,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. Prospectus supplements may also add, update or change information contained or incorporated by reference in this prospectus. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness. This prospectus, together with the applicable prospectus supplements and the documents incorporated by reference into this prospectus, includes all material information relating to this offering. You should carefully read this prospectus, the applicable prospectus supplement, the information and documents incorporated herein by reference and the additional information under the heading “Where You Can Find More Information” before making an investment decision.

You should rely only on the information we have provided or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained or incorporated by reference in this prospectus. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information we have incorporated herein by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

This prospectus may not be used to consummate sales of our securities, unless it is accompanied by a prospectus supplement. To the extent there are inconsistencies between any prospectus supplement, this prospectus and any documents incorporated by reference, the document with the most recent date will control.

Unless the context otherwise requires, “Chelsea,” “the company,” “we,” “us,” “our” and similar names refer to Chelsea Therapeutics International, Ltd. and our subsidiary, Chelsea Therapeutics, Inc.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. Because it is a summary, it might not contain all of the information that is important to you. Accordingly, you are urged to carefully review this prospectus in its entirety, including “Risk Factors” beginning on page 6 and our financial statements and related notes thereto incorporated by reference herein, before making an investment decision.

Our Company

We are a development stage pharmaceutical company that seeks to acquire, develop and commercialize innovative products for the treatment of a variety of human diseases. Our strategy is to develop technologies that address important unmet medical needs or offer improved, cost-effective alternatives to current methods of treatment. Specifically, we are developing a novel therapeutic agent for the treatment of neurogenic orthostatic hypotension, or NOH, and related conditions and diseases along with our development of prescription products for multiple autoimmune disorders including rheumatoid arthritis, psoriasis, inflammatory bowel disease and cancer.

We are currently focusing the majority of our drug development resources on two clinical stage development projects: droxidopa for symptomatic neurogenic hypotension and other potential indications; and our portfolio of non-metabolized antifolate compounds for the treatment of rheumatoid arthritis.

Droxidopa, our most advanced investigational product candidate, is an orally active synthetic precursor of norepinephrine. It is being developed for the treatment of NOH and is currently approved and marketed in Japan for the treatment of symptomatic orthostatic hypotension, freezing of gait in Parkinson’s disease and intradialytic hypotension, or IDH. During 2007, the U.S. Food and Drug Administration, or FDA, granted orphan drug status to droxidopa for the treatment of NOH and the European Medicines Agency, or EMEA, granted orphan medicinal product designation for the treatment of patients with Pure Autonomic Failure and patients with Multiple Systems Atrophy. Droxidopa is currently being studied for the treatment of NOH in two double-blind pivotal Phase III trials designed to compare droxidopa to placebo at multiple sites in North America, Europe and Australia. We reached our targeted enrollment in our first study in late June 2009 and expect to announce preliminary data on this study and reach our targeted enrollment in our second study in the third quarter of 2009. Full data from the two studies are expected later in 2009 and we anticipate submitting a new drug application to the FDA in the fourth quarter of 2009.

Droxidopa is also being developed for the treatment of IDH for which we completed a double-blind, placebo controlled Phase II study in the United States in March 2009. In addition, a Phase II trial of droxidopa, alone and in combination with carbidopa, for the treatment of fibromyalgia began in early 2009, under approval from the United Kingdom’s Medicines and Healthcare Products Regulatory Agency.

In addition to droxidopa, we are currently developing a portfolio of molecules for the treatment of various autoimmune/inflammatory diseases. The most advanced platform is a portfolio of metabolically inert antifolate molecules engineered to have potent anti-inflammatory and anti-tumor activity to treat a range of immunological disorders, including two clinical stage product candidates designated as CH-1504 and CH-4051. In March 2009, we announced positive results from a preliminary analysis of the recently completed Phase II clinical trial of CH-1504 for the treatment of rheumatoid arthritis. This trial was designed to compare the efficacy and tolerability of CH-1504 against methotrexate, currently the leading antifolate treatment and standard of care for a broad range of abnormal cell proliferation diseases. The preliminary analysis showed comparable ACR20/50/70 response rates to patients treated with 0.25mg, 0.50mg and 1.0mg of CH-1504 against patients treated with a standard 20mg oral dose of methotrexate. In addition, the efficacy of CH-1504 was associated with improved tolerability and reduced hepatotoxicity compared with methotrexate. In April 2009, we announced positive findings from our Phase I study of CH-4051, the L-isomer of CH-1504. Data from this single and multiple ascending dose study demonstrated that CH-4051 is safe and well tolerated up to a maximally tolerated dose of 7.5mg. Complementing our autoimmune/inflammatory program is a second platform consisting of a portfolio of therapeutics targeting immune-mediated inflammatory disorders and transplantation, known as our I-3D portfolio.

Since inception we have focused primarily on organizing and staffing our company, negotiating in-licensing agreements with our partners, acquiring, developing and securing our proprietary technology, participating in regulatory discussions with the FDA, the EMEA and other regulatory agencies and undertaking preclinical trials and clinical trials of our product candidates. We are a development stage company and have generated no revenue since

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inception. We do not anticipate generating any product revenue until and unless we successfully obtain approval from the FDA or equivalent foreign regulatory bodies to begin selling our pharmaceutical candidates although we could potentially generate revenue by entering into strategic agreements including out-licensing, co-development or co-promotion of our drug candidates. Developing pharmaceutical products is a lengthy and expensive process. Even if we do not encounter unforeseen safety issues or timing or other delays during the course of developing our currently licensed product candidates, we would not anticipate receiving regulatory approval to market any such products until, at the earliest, the second half of 2010. Currently, development expenses are being funded with proceeds from equity financings completed in December 2004, February 2006, March 2007, November 2007 and July 2009. To the extent we move our products into additional clinical trials and expand our commercialization and marketing efforts for droxidopa, our need to finance operating costs will continue. Accordingly, our success depends not only on the safety and efficacy of our product candidates, but also on our ability to finance the development and/or commercialization of the products.

Recent Developments

On July 28, 2009, we closed on a “registered direct” offering and issued an aggregate of 3,325,000 shares of our common stock at a price of \$4.00 per share, which resulted in gross proceeds of \$13,300,000. We received net proceeds of approximately \$12.6 million after deduction of placement agent fees and expenses. We intend to use the net proceeds from the sale of the common stock to accelerate the commercialization and marketing of droxidopa, to fund the development of our other product candidates, including clinical trials, research and development expenses and general and administrative expenses, and for general corporate purposes.

Corporate History

Our operating company was incorporated in Delaware in April 2002 under the name Aspen Therapeutics, Inc., and changed its name to Chelsea Therapeutics, Inc. in July 2004. On February 11, 2005, Chelsea Therapeutics, Inc. completed a merger with Ivory Capital Corporation, a publicly traded Colorado corporation formed in May 1988. At the time of the transaction, Ivory Capital had only nominal assets and no operating activities. In connection with this merger transaction, a wholly owned subsidiary of Ivory Capital Corporation merged with and into Chelsea Therapeutics, Inc., with Chelsea Therapeutics, Inc. remaining as the surviving corporation and a wholly owned subsidiary of Ivory Capital Corporation. In connection with the merger, the former stockholders of Chelsea Therapeutics, Inc. received 96.75% percent of our outstanding equity on a fully diluted basis. Pursuant to the terms of the merger, the sole officer and director of Ivory Capital Corporation prior to the merger was replaced with the officers and directors of Chelsea Therapeutics, Inc.

On June 17, 2005, Ivory Capital Corporation formed a wholly owned subsidiary in Delaware named Chelsea Therapeutics International, Ltd. for the purposes of reincorporating in Delaware. On July 28, 2005, Ivory Capital Corporation merged with Chelsea Therapeutics International, Ltd., with Chelsea Therapeutics International, Ltd. as the surviving corporation. As a result, Chelsea Therapeutics International, Ltd. is the public reporting company and is the owner of all of the issued securities of Chelsea Therapeutics, Inc., its operating subsidiary.

When we refer in this prospectus to business and financial information relating to periods prior to December 31, 2004, we are referring to the business and financial information of Chelsea Therapeutics, Inc. unless the context requires otherwise. When we refer in this prospectus to business and financial information for periods between January 1, 2005 and July 28, 2005, we are referring to the business and financial information of Ivory Capital Corporation. Except as noted, all share numbers included herein reflect the conversion of every nine shares of Ivory Capital Corporation common stock for one share of Chelsea Therapeutics International, Ltd. common stock that occurred in connection with our Delaware reincorporation on July 28, 2005.

Our executive offices are located at 3530 Toringdon Way, Suite 200, Charlotte, North Carolina 28277 and our telephone number at that location is (704) 341-1516. Our website address is www.chelsearx.com. The information contained on our website is not a part of, and should not be construed as being incorporated by reference into, this prospectus.

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Offerings Under This Prospectus

We may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, with a total value of up to \$60,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of any offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities.

The prospectus supplement also may add, update or change information contained in this prospectus or in documents we have incorporated by reference into this prospectus. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

This prospectus may not be used to consummate a sale of any securities unless it is accompanied by a prospectus supplement.

We may sell the securities directly to investors or to or through agents, underwriters or dealers. We, and our agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. If we offer securities through agents or underwriters, we will include in the applicable prospectus supplement:

- the names of those agents or underwriters;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the net proceeds to us.

Common Stock

We may issue shares of our common stock from time to time. The holders of common stock are entitled to one vote per share on all matters to be voted upon by stockholders. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock are entitled to receive ratably any dividends that may be declared from time to time by our board of directors out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of any preferred stock then outstanding.

Preferred Stock

We may issue shares of our preferred stock from time to time, in one or more series. Our board of directors will determine the rights, preferences, privileges and restrictions of the preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, without any further vote or action by stockholders. Convertible preferred stock will be convertible into our common stock or exchangeable for our other securities. Conversion may be mandatory or at your option or both and would be at prescribed conversion rates.

If we sell any series of preferred stock under this prospectus and applicable prospectus supplements, we will fix the rights, preferences, privileges and restrictions of the preferred stock of such series in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related

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series of preferred stock. We urge you to read the applicable prospectus supplement related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

Warrants

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. We will evidence each series of warrants by warrant certificates that we will issue under a separate agreement. We may enter into warrant agreements with a bank or trust company that we select to be our warrant agent. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the applicable prospectus supplement related to the particular series of warrants being offered, as well as the warrant agreements and warrant certificates that contain the terms of the warrants. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of warrant agreement or warrant certificate containing the terms of the warrants we are offering before the issuance of the warrants.

Debt Securities

We may offer debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any other unsecured and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Convertible debt securities will be convertible into or exchangeable for our common stock or our other securities. Conversion may be mandatory or at your option or both and would be at prescribed conversion rates.

With respect to any debt securities that we issue, we will issue such debt securities under an indenture, which we would enter into with the trustee named in the indenture. Any indenture would be qualified under the Trust Indenture Act of 1939.

Units

We may issue units consisting of common stock, preferred stock, debt securities and/or warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. In this prospectus, we have summarized certain general features of the units. We urge you, however, to read the applicable prospectus supplement related to the series of units being offered, as well as the unit agreements that contain the terms of the units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference reports that we file with the SEC, the form of unit agreement and any supplemental agreements that describe the terms of the series of units we are offering before the issuance of the related series of units.

RISK FACTORS

Investing in our securities involves risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in our company. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed below and under the heading “Risk Factors” in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under the heading “Risk Factors” included in our most recent annual report on Form 10-K, as revised or supplemented by our most recent quarterly report on Form 10-Q, each of which are on file with the SEC and are incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future.

Risks Related to Our Business

We currently have no product revenue and will need to raise additional capital to operate our business.

To date, we have generated no product revenue. Until, and unless, we receive approval from the FDA and other regulatory authorities for our product candidates, we cannot sell our drugs and will not have product revenue. Currently, our primary product candidates are droxidopa and our antifolates portfolio, and none are approved by the FDA nor, with the exception of droxidopa which has Japanese approval, any other regulatory agency for sale. Therefore, for the foreseeable future, we will have to fund all of our operations and development expenditures, including anticipated 2009 expenses of at least \$30 million, from cash on hand, redemptions of or borrowings against investments, other equity or debt financings, licensing fees and grants. In addition, as a result of our financial position as of December 31, 2008, the audit opinion received from our independent auditors, which is included in our financial statements incorporated by reference in this report, contained a notation related to our ability to continue as a going concern.

Even if we sell all of the securities offered by this prospectus, in order to fund operations and increase our cash reserves in 2009 and beyond, we may need to outlicense our products or seek additional sources of financing and such opportunities might not be available on favorable terms, if at all. If we do not succeed in raising additional funds on acceptable terms, we might not be able to complete planned preclinical and clinical trials or obtain approval of any product candidates from the FDA and other regulatory authorities. In addition, we could be forced to discontinue product development, reduce or forego sales and marketing efforts, forego attractive business opportunities or curtail operations. Any additional sources of financing could involve the issuance of our equity securities, which would have a dilutive effect on our stockholders.

We are not currently profitable and might never become profitable.

We have a history of losses and expect to incur substantial losses and negative operating cash flow for the foreseeable future, and we might never achieve or maintain profitability. Even if we succeed in developing and commercializing one or more product candidates, we expect to incur substantial losses for the foreseeable future and might never become profitable. From inception through June 30, 2009 we had losses of approximately \$82.5 million. We had net losses of approximately \$35.1 million and approximately \$15.1 million for the years ended December 31, 2008 and 2007, respectively, and we anticipate losses for the foreseeable future. Actual losses will depend on a number of considerations, including:

- the pace of commercialization and marketing efforts for droxidopa;
- the pace and success of preclinical development and clinical trials for droxidopa, antifolates and other product candidates;
- possible out-licensing of our product candidates;
- seeking regulatory approval for our various product candidates;
- discussions with regulatory agencies concerning the design of our clinical trials;

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- our ability to identify and recruit patients into our clinical trials at costs consistent with our current estimates;
- the pace of development of new intellectual property for our existing product candidates;
- in-licensing and development of additional product candidates;
- implementing additional internal systems and infrastructure; and
- hiring additional personnel.

We also expect to experience negative cash flow for the foreseeable future as we fund our operating losses and development expenditures. As a result, we will need to generate significant revenue in order to achieve and maintain profitability. We might not be able to generate revenue or achieve profitability in the future and are unlikely to do so in the near term. Our failure to achieve or maintain profitability could negatively impact the value of our securities.

We are a development-stage company and might not be able to commercialize any product candidates.

We are a development-stage company and have not demonstrated our ability to perform the functions necessary for the successful commercialization of any product candidates. The successful commercialization of any product candidates will require us to perform a variety of functions, including:

- continuing to undertake preclinical development and clinical trials;
- participating in regulatory approval processes;
- formulating and manufacturing products; and
- conducting sales, marketing and distribution activities.

Our operations have been limited to organizing and staffing our company, negotiating in-licensing agreements with our partners, acquiring, developing and securing our proprietary technology, participating in regulatory discussions with the FDA, the EMEA and other regulatory agencies and undertaking preclinical trials and clinical trials of our product candidates. These operations provide a limited basis for you to assess our ability to commercialize our product candidates and the advisability of investing in our securities.

Our potential future earnings may be reduced should we decide to out-license one or more of our drug product candidates.

We may decide to out-license one or more of our drug product candidates, reducing future profits available to us. Should we license our drug product candidates to another pharmaceuticals company, it would allow the partner to market and sell our compounds in one or more markets around the world. If either the antifolates or droxidopa are licensed to a strategic partner, the profit available to us may be substantially reduced from what might otherwise be possible should we retain all rights to the products and market and sell them directly.

We might not obtain the necessary U.S. or worldwide regulatory approvals to commercialize any product candidates.

We cannot assure you that we will receive the approvals necessary to commercialize our product candidates including droxidopa, our antifolates, or any other product candidate either currently in our drug candidate portfolio or that we might acquire or develop in the future. We will need FDA approval to commercialize our product candidates in the United States and approvals from equivalent regulatory authorities in foreign jurisdictions to commercialize our product candidates in those jurisdictions. In order to obtain FDA approval of any product candidate, we must submit to the FDA a new drug application, or NDA, demonstrating that the product candidate is safe for humans and effective for its intended use. This demonstration requires significant research and animal tests, which are referred to as preclinical studies, as well as human tests, which are referred to as clinical trials. Satisfaction of the FDA's regulatory requirements typically takes many years, depends upon the type, complexity and novelty of the product candidate and requires substantial resources for research, development and testing. We cannot predict whether our research and clinical approaches will result in drugs that the FDA considers safe for

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humans and effective for indicated uses. The FDA has substantial discretion in the drug approval process and may require us to conduct additional preclinical and clinical testing or to perform post-marketing studies. The approval process might also be delayed by changes in government regulation, future legislation or administrative action or changes in FDA policy that occur prior to or during our regulatory review. Delays in obtaining regulatory approvals might:

- delay commercialization of, and our ability to derive product revenue from, a product candidate;
- impose costly procedures on us; and
- diminish any competitive advantages that we might otherwise enjoy.

Even if we comply with all FDA requests, the FDA may ultimately reject one or more of our NDAs. We cannot be sure that we will ever obtain regulatory clearance for any of our product candidates. Failure to obtain FDA approval of these product candidates, particularly droxidopa or our antifolates, will severely undermine our business and could substantially extend the period before we have a saleable product, leaving us without any source of revenue until another product candidate can be developed. There is no guarantee that we will ever be able to develop or acquire another product candidate.

In foreign jurisdictions, we must receive approval from the appropriate regulatory authorities before we can commercialize any drugs. Foreign regulatory approval processes generally include all of the risks associated with the FDA approval procedures described above. We cannot assure you that we will receive the approvals necessary to commercialize product candidates for sale outside the United States.

Our drug candidates may require extensive reformulation work prior to approval or they may prove unsuitable for further development regardless of reformulation efforts.

We are currently utilizing a formulation of droxidopa in our clinical trials that is obtained from Dainippon Sumitomo Pharma Co., Ltd., or DSP, which uses a process incompatible with FDA good manufacturing process, or GMP, guidelines. During 2008, we collaborated with a contract manufacturing organization and successfully developed a GMP compatible formulation of droxidopa. DSP is also working to finalize an approvable formulation for the US market. While we believe this activity is progressing at an appropriate pace, final resolution of the manufacturing process and supplier could impact our launch of droxidopa in the US market.

Our development program for CH-1504 was delayed in May of 2006 as a result of data that came to our attention concerning possible bioavailability issues and animal data suggesting significant variations in blood plasma levels. We have identified and run bioavailability tests on a different formulation of CH-1504 that we believe has improved the drug relative to these issues; however we cannot determine at this time whether these improvements will be adequate to permit FDA and other regulatory approvals.

Other formulation issues may arise or prove more significant than anticipated, either with droxidopa, CH-1504 or with other drug candidates in our portfolio.

Our product candidate CH-1504 has had only limited formal clinical trials.

Our product candidate, CH-1504, is in an early stage of development and requires extensive clinical testing. In June 2005, we commenced Phase I dose escalation clinical trials of CH-1504 in humans in the United Kingdom at Guy's Hospital in London, under the Clinical Trial Authorization issued by the Medicines and Healthcare Products Regulatory Agency, the United Kingdom's health authority. Following the recent reformulation program, we began additional clinical testing to ascertain equivalency ratios for the reformulated compound as compared to the compound used during the Phase I trials in the UK. Following this testing we commenced Phase II clinical trials for CH-1504 in rheumatoid arthritis. After the completion of those trials and depending on available funding, we may initiate several additional Phase II studies in other indications and, as appropriate, Phase III studies in rheumatoid arthritis with or without a partner. Upon completion of the Phase III studies in rheumatoid arthritis, we hope to use data from these studies to file a NDA in the United States. We currently estimate a global filing of the NDA no sooner than 2011. However, at any point during the process we might decide to focus our efforts on a different lead compound, and we cannot predict with any certainty the success or timing of our clinical trials, if or when we might submit an NDA for regulatory approval of this product candidate or whether such an NDA will be accepted.

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There has been only very limited testing of our I-3D product candidates.

Our I-3D product candidates are early in their development. None of the candidates have had adequate toxicology testing in animals to permit clinical testing and there is no clinical evidence of efficacy for any of these candidates, despite limited similarities with compounds currently marketed by others. Animal toxicology trials on our I-3D compounds may not permit further development of these drugs or we may have to carry out toxicology trials on several compounds before we find one that is appropriate for clinical testing, if at all. Once clinical trials are undertaken, the compound or compounds may not prove adequately safe and efficacious in humans and may not be approved by the FDA or other regulatory agencies.

Clinical trials are very expensive, time-consuming and difficult to design and implement.

Human clinical trials are very expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. The clinical trial process is also time-consuming. For example, because we did not receive orphan drug status from the EMEA for droxidopa as a treatment for Parkinson's disease, our clinical trials for that indication might have to be more involved and take longer to complete and get reviewed than otherwise would have been the case. Furthermore, failure can occur at any stage of the trials, and we could encounter problems that cause us to abandon or repeat clinical trials. The commencement and completion of clinical trials might be delayed by several factors, including:

- unforeseen safety issues;
- clarification of dosing issues;
- lack of effectiveness during clinical trials;
- slower than expected rates of patient recruitment, including for the aggregate of approximately 675 patients required to complete the several Phase I, Phase II and Phase III trials that are ongoing in 2009 for droxidopa as a treatment for NOH;
- inability to monitor patients adequately during or after treatment;
- inability or unwillingness of medical investigators to follow our clinical protocols; and
- unexpected emergence of competitive drugs against which our compounds might compete for clinical trial resources or need to be tested.

In addition, we or the FDA or another governing regulatory agency may suspend our clinical trials at any time if it appears that we are exposing participants to unacceptable health risks or if the regulatory agency finds deficiencies in the conduct of these or our regulatory submissions. Therefore, we cannot predict with any certainty the schedule for our current or any future clinical trials.

The results of our clinical trials might not support our product candidate claims.

Even if our clinical trials are completed as planned, we cannot be certain that their results will support our product candidate claims. Success in preclinical testing and early clinical trials does not ensure that later clinical trials will be successful, and we cannot be sure that the results of later clinical trials will replicate the results of prior clinical trials and preclinical testing. The clinical trial process might fail to demonstrate that our product candidates are safe for humans and effective for indicated uses. This failure would cause us to abandon a product candidate and might delay development of other product candidates. Any delay in, or termination of, our clinical trials will delay the filing of our NDAs with the FDA and, ultimately, our ability to commercialize our product candidates and generate product revenue.

We intend to explore additional indications for droxidopa, however these programs may not prove successful.

We have announced our exploration of certain additional indications for droxidopa and we may make similar announcements in the future. While trials conducted by our partner, DSP, for the Japanese market provide evidence of efficacy for certain indications, other indications may be explored for which we have no existing clinical evidence of efficacy. Such trials are likely to be very costly. We do not have market approval from the FDA or other regulatory agencies for any of the indications we are exploring and there are no guarantees that additional clinical trials will provide new evidence of efficacy in the targeted indications or permit us to gain market approval from regulatory agencies.

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Physicians and patients might not accept and use our drugs.

Even if the FDA or any foreign regulatory authority approves any of our product candidates, physicians and patients might not accept and use them. Acceptance and use of our products will depend upon a number of factors including:

- perceptions by members of the healthcare community, including physicians, about the safety and effectiveness of our drug;
- cost-effectiveness of our product relative to competing products;
- understanding by prescribing physicians of the medical conditions we are attempting to address;
- availability of reimbursement for our product from government or other healthcare payers; and
- effectiveness of marketing and distribution efforts by us and our licensees and distributors, if any.

Because we expect that sales of our product candidates could, if approved, generate a substantial portion of our product revenue for an extended period, the failure of such a drug to find market acceptance would harm our business and could require us to seek additional financing or curtail our operations.

Our drug development program depends upon third-party researchers who are outside our control.

We depend upon independent clinical research organizations, investigators and other collaborators, such as universities and medical institutions, to conduct our preclinical and clinical trials under agreements with us. These collaborators are not our employees and we cannot control the amount or timing of resources that they devote to our programs. They might not assign as great a priority to our programs or pursue them as diligently as we would if we were undertaking such programs ourselves. If outside collaborators fail to devote sufficient time and resources to our drug-development programs, or if their performance is substandard, the approval of our FDA applications, if any, and our introduction of new drugs, if any, will be delayed. These collaborators might also have relationships with other commercial entities, some of which might compete with us. If our collaborators assist our competitors at our expense, our competitive position would be harmed.

Our drug development program also depends upon our partners who are outside our control.

We have licensed certain rights related to droxidopa from DSP and depend upon them for data and support in advancing our clinical program for this compound. In addition, DSP is currently the sole manufacturer of this compound for our clinical program. Without the timely support of DSP or any other partners, our drug development programs could suffer significant delays, require significantly higher spending or face cancellation.

We rely exclusively on third parties to formulate and manufacture any product candidates.

We have only limited experience in drug formulation and no experience in drug manufacturing and do not intend to establish our own manufacturing facilities. We lack the resources and expertise to formulate or manufacture our own product candidates. While we have a contract in place with DSP covering droxidopa, we currently have no contract for the commercial scale manufacture of our antifolates or I-3D compounds. We have contracted with one or more manufacturers to manufacture, supply, store and distribute drug supplies for our clinical trials. If any of our current product candidates or any other product candidates that we may develop or acquire in the future receive FDA approval, we will rely on one or more third-party contractors to manufacture our drugs. Our anticipated future reliance on a limited number of third-party manufacturers exposes us to the following risks:

- we might not be able to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA must approve any replacement contractor. This approval would require new testing and compliance inspections. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our products after receipt of FDA approval, if any;

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- our third-party manufacturers might be unable to formulate and manufacture our drugs in the volume and of the quality required to meet our clinical and commercial needs, if any;
- our contract manufacturers might not perform as agreed or might not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products; and
- drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the U.S. Drug Enforcement Agency, or DEA, and corresponding state agencies to ensure strict compliance with GMP and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards.

Each of these risks could delay our clinical trials, the approval, if any, of our product candidates by the FDA or the commercialization of our product candidates or result in higher costs or deprive us of potential product revenue.

We have no experience selling, marketing or distributing products and only limited internal capability to do so.

We currently have no sales, marketing or distribution capabilities other than as provided by our Vice President of Sales and Marketing. We anticipate expanding our marketing and sales capabilities over the next 12 to 18 months in anticipation of commercializing droxidopa. We would need to allocate resources to, or contract with one or more third parties for, the sale and marketing of our other proposed products. As a result, our future success depends, in part, on:

- our ability to enter into and maintain collaborative relationships for these capabilities, either through out-licensing of our compounds or through contracting organizations;
- the collaborator's strategic interest in the products under development; and
- such collaborator's ability to successfully market and/or sell any such products.

To the extent that we decide not to, or are unable to, enter into collaborative arrangements with respect to the sales and marketing of our proposed products or if we decide to add internal resources to complement third party resources, significant development expenditures, management resources and time will be required to establish and develop our own marketing and sales force with technical expertise.

If we cannot compete successfully for market share against other drug companies, we will not achieve sufficient product revenue and our business will suffer.

The market for our antifolate product candidates is characterized by intense competition and rapid technological advances. The initial market for droxidopa, while smaller, has well established generic competition. Other markets for droxidopa, such as fibromyalgia, are emerging with new and heavily marketed offerings. If our antifolates, droxidopa or other product candidates receive FDA approval, they will compete with a number of existing and future drugs and therapies developed, manufactured and marketed by others. Existing or future competing products might provide greater therapeutic convenience, efficacy or other benefits for a specific indication than our products or might offer comparable performance at a lower cost. If our products fail to capture and maintain market share, we will not achieve sufficient product revenue and our business will suffer.

We will compete against fully integrated pharmaceutical companies and smaller companies that are collaborating with larger pharmaceutical companies, academic institutions, government agencies and other public and private research organizations. Many of these competitors have compounds already approved or in development. In addition, many of these competitors, either alone or together with their collaborative partners, operate larger research and development programs or have substantially greater financial resources than we do, as well as significantly greater experience in:

- developing drugs;
- undertaking preclinical testing and human clinical trials;
- obtaining FDA and other regulatory approvals of drugs;

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- formulating and manufacturing drugs;
- launching, marketing and selling drugs; and
- post-marketing safety surveillance.

Our ability to generate product revenue will be diminished if our drugs sell for inadequate prices or patients are unable to obtain adequate levels of reimbursement.

Our ability to commercialize our drugs, alone or with collaborators, will depend in part on the extent to which reimbursement will be available from:

- government and health administration authorities;
- private health maintenance organizations and health insurers; and
- other healthcare payers.

Significant uncertainty exists as to the reimbursement status of newly approved healthcare products. Healthcare payers, including Medicare, are challenging the prices charged for medical products and services. Government and other healthcare payers increasingly attempt to contain healthcare costs by limiting both coverage and the level of reimbursement for drugs. Even if a product candidate is approved by the FDA, insurance coverage might not be available and reimbursement levels might be inadequate to cover our drug. If government and other healthcare payers do not provide adequate coverage and reimbursement levels for our product, once approved, market acceptance and our revenue could be reduced. Congress currently is debating an overhaul of healthcare insurance and any resulting legislation could negatively impact the reimbursement of prescription drug costs.

In addition, not all physicians recognize a separate indication for symptomatic neurogenic orthostatic hypotension and we cannot provide assurances that reimbursement will be approved by the relevant decision makers even if droxidopa receives market approval from the FDA or other regulatory authorities.

Developments by competitors might render our products or technologies obsolete or non-competitive.

Companies that currently sell both generic and proprietary compounds for the treatment of rheumatoid arthritis include, but are not limited to, Abbott Laboratories, Amgen, Sanofi-Aventis, Barr Laboratories, Boehringer Ingelheim Pharma, Hoffmann-La Roche, Johnson & Johnson, Bristol-Myers Squibb and Mylan Laboratories. Companies that currently sell compounds used for the treatment of orthostatic hypotension include Shire, Mylan Pharmaceuticals, Eon Labs, Impax Laboratories and King Pharmaceuticals. Alternative technologies are being developed to treat rheumatoid arthritis by numerous companies including Pfizer, Rigel and Celltech, which are in advanced clinical trials. In addition, companies pursuing different but related fields represent substantial competition. Many of these organizations competing with us have substantially greater capital resources, larger research and development staffs and facilities, longer drug development history in obtaining regulatory approvals and greater manufacturing and marketing capabilities than we do. These organizations also compete with us to attract qualified personnel and parties for acquisitions, joint ventures or other collaborations.

Our success, competitive position and future revenue will depend in part on our ability to obtain and maintain patent protection for our products, methods, processes and other technologies, to preserve our trade secrets, to prevent third parties from infringing on our proprietary rights and to operate without infringing the proprietary rights of third parties.

We do not know whether any of our pending patent applications or those patent applications that we may file or license in the future will result in the issuance of any patents. Moreover, we cannot predict the degree of patent protection that will be afforded by those patent applications that do result in issuance. Although we generally seek the broadest patent protection available for our proprietary compounds, we may not be able to obtain patent protection for the actual composition of any particular compound and may be limited to protecting a new method of use for the compound or otherwise restricted in our ability to prevent others from exploiting the compound. If our patent protection for any particular compound is limited to a particular method of use or indication such that, if a third party were to obtain approval of the compound for use in another indication, we could be subject to competition arising from off-label use.

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Moreover, our issued patents and those that may issue in the future, or those licensed to us, may be challenged, invalidated, rendered unenforceable or circumvented, any of which could limit our ability to stop competitors from marketing related products. In addition, the rights granted under any issued patents may not provide us with competitive advantages against competitors with similar compounds or technologies. Furthermore, our competitors may independently develop similar technologies in a manner that does not infringe our patents or other intellectual property.

If a third party legally challenges our patents or other intellectual property rights that we own or license, we could lose certain of these rights. For example, third parties may challenge the validity of our U.S. or foreign patents through reexaminations, oppositions or other legal proceedings. If successful, a challenge to our patents or other intellectual property rights could deprive us of competitive advantages and permit our competitors to use our technology to develop similar products.

In addition, we do not anticipate having patent protection on droxidopa when and if it receives market approval by the FDA for NOH under the brand name Northera™. While the orphan drug designation for this compound by the FDA will provide seven years of market exclusivity, we will not be able to exclude other companies from manufacturing and/or selling this compound beyond that timeframe.

Claims by third parties that we infringe their proprietary rights may result in liability for damages or prevent or delay our developmental and commercialization efforts.

If a third party were to file a patent infringement suit against us, we could be forced to stop or delay research, development, manufacturing or sales of any infringing product in the country or countries covered by the patent infringed, unless we can obtain a license from the patent holder. Any necessary license may not be available on acceptable terms or at all, particularly if the third party is developing or marketing a product competitive with the infringing product. Even if we are able to obtain a license, the rights may be nonexclusive, which would give our competitors access to the same intellectual property. We also may be required to pay substantial damages to the patent holder in the event of an infringement. If we have supplied infringing products to third parties for marketing or have licensed third parties to manufacture, use or market infringing products, we may be obligated to indemnify these third parties for any damages they may be required to pay to the patent holder and for any losses they may sustain themselves as a result.

We may initiate patent litigation against third parties to protect or enforce our patent rights. Failure to protect our patents and other proprietary rights may materially harm our business, financial condition and results of operations.

Legal or administrative proceedings may be necessary to defend against claims of infringement or to enforce our intellectual property rights. If we become involved in any such proceeding, irrespective of the outcome, we may incur substantial costs, and the efforts of our technical and management personnel may be diverted, which could materially harm our business. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that disclosure of some of our confidential information could be compelled and the information compromised. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments that, if perceived as negative by securities analysts or investors, could have a substantial adverse effect on the trading price of our common stock.

Existing patents and proprietary rights could harm our competitive position.

Other entities may have or obtain patents or proprietary rights that could limit our ability to manufacture, use, sell, offer for sale or import products or impair our competitive position. In addition, to the extent that a third party develops new technology that covers our products, we may be required to obtain licenses to that technology, which licenses might not be available or may not be available on commercially reasonable terms, if at all. Our failure to obtain a license to any technology that we require may materially harm our business, financial condition and results of operations.

Changes in either patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection.

The laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Therefore, enforceability or scope of our patents in the United States or in foreign countries cannot be predicted with certainty, and, as a result, any patents that we own or license may not provide sufficient protection against competitors.

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Some jurisdictions have laws that permit the government to force a patentee to grant a license to a third party for commercialization of a patented product if the government concludes that the product is not sufficiently developed or not meeting the health needs of the population. Such compulsory licensing laws are very rarely invoked outside of South America and Africa. In addition, a number of countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may be limited to monetary relief and may be unable to enjoin infringement, which could materially diminish the value of the patent. Such compulsory licenses could be extended to include some of our product candidates, which may limit our potential revenue opportunities.

Because of the extensive time required for development, testing and regulatory review of a new drug, it is possible that any related patent may expire before any of our product candidates can be commercialized or remain in force for only a short period following commercialization. In either case, this would reduce any advantages of the patent.

If we are unable to satisfy our obligations under current and future license agreements, we could lose license rights which would adversely affect our business.

We are a party to a license agreement with M. Gopal Nair under which we license patent rights for our product candidate CH-1504 and other antifolates. Similarly, we license patent and/or certain other rights from DSP for droxidopa. We may enter into additional licenses in the future. Our existing licenses impose, and we expect future licenses will impose, various milestone payments, royalty payments and other obligations on us. If we fail to comply with our obligations in our intellectual property licenses with third parties, we could lose license rights that are important to our business. If a licensor challenges our license position, our competitive position and business prospects could be harmed.

Our license agreement with Dr. Nair reserves rights to the licensor in India. Therefore, we will not commercialize our antifolates in India. Our license agreement with DSP reserves rights to the licensor in Japan, Korea, China and Taiwan which precludes our commercialization of droxidopa in those markets.

If we are unable to enforce trade secret protection and confidentiality agreements with our employees, our competitive position might be harmed.

Our success also depends upon the skills, knowledge and experience of our scientific and technical personnel, our consultants and advisors, as well as our licensors and contractors. To help protect our proprietary know-how and our inventions for which patents are unobtainable or difficult to obtain, we rely on trade secret protection and confidentiality agreements. To this end, it is our policy to require all of our employees, consultants, advisors and contractors to enter into agreements that prohibit the disclosure of confidential information and, where applicable, require disclosure and assignment to us of the ideas, developments, discoveries and inventions important to our business. These agreements might not provide adequate protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information. If any of our trade secrets, know-how or other proprietary information is disclosed, the value of our trade secrets, know-how and other proprietary rights would be significantly impaired and our business and competitive position would suffer.

If we infringe the rights of third parties we could be prevented from selling products, forced to pay damages and defend against litigation.

If our products, methods, processes and other technologies infringe the proprietary rights of other parties, we could incur substantial costs and we might have to:

- obtain licenses, which might not be available on commercially reasonable terms, if at all;
- abandon an infringing drug candidate;
- redesign our products or processes to avoid infringement;
- stop using the subject matter claimed in the patents held by others;

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- pay damages; or
- defend litigation or administrative proceedings, which might be costly whether we win or lose, and which could result in a substantial diversion of valuable management resources.

We might not successfully manage our growth.

We are a small, development stage company. Our success will depend upon the expansion of our operations and the effective management of our growth, which will place a significant strain on our management and on our administrative, operational and financial resources. We currently have 18 employees. We may also have to augment our operational, financial and management systems and hire and train even more qualified personnel. If we are unable to manage our growth effectively, our business would be harmed.

We might be exposed to liability claims associated with the use of hazardous materials and chemicals.

Our research and development activities might involve the controlled use of hazardous materials and chemicals. Although we believe that our safety procedures, and those of our partners, for using, storing, handling and disposing of these materials comply with federal, state, local and, where applicable, foreign laws and regulations, we cannot completely eliminate the risk of accidental injury or contamination from these materials. In the event of such an accident, we could be held liable for any resulting damages and any liability could materially adversely affect our business, financial condition and results of operations. In addition, the laws and regulations governing the use, manufacture, storage, handling and disposal of hazardous or radioactive materials and waste products might require us to incur substantial compliance costs that could materially adversely affect our business, financial condition and results of operations.

We rely on key executive officers and scientific and medical advisors, and their knowledge of our business and technical expertise would be difficult to replace.

As a small, development stage company, we are highly dependent on our executive officers, including particularly our Chief Executive Officer, Simon Pedder, Ph.D., and our principal scientific, regulatory and medical advisors. Dr. Pedder is the only executive officer whose employment with us is governed by an employment agreement, and the term of employment under that agreement expires in May 2012. We do not have “key person” life insurance policies for any of our officers. The loss of the technical knowledge and management and industry expertise of any of our key personnel could result in delays in product development, loss of any future customers and sales and diversion of management resources, which could adversely affect our operating results.

If we are unable to hire additional qualified personnel, our ability to grow our business will be harmed.

As a small, development stage company, we will need to hire additional qualified personnel with expertise in preclinical testing, clinical research and testing, government regulation, formulation and manufacturing and sales and marketing. We compete for qualified individuals with numerous pharmaceutical and biopharmaceutical companies, universities and other research institutions. Competition for such individuals is intense, and we cannot be certain that our search for such personnel will be successful. Attracting and retaining qualified personnel is critical to our success.

We might incur substantial liabilities and might be required to limit commercialization of our products in response to product liability lawsuits.

The testing and marketing of medical products entail an inherent risk of product liability. If we cannot successfully defend ourselves against product liability claims, we might incur substantial liabilities or be required to limit commercialization of our products. Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of our products. Although we carry clinical trial insurance, we might not be able to renew such insurance at a reasonable cost, if at all, or our intended collaborators may be unable to obtain such insurance at a reasonable cost, if at all. Even if our agreements with any future collaborators entitle us to indemnification against losses, that indemnification might not be available or adequate should any claim arise.

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Risks Related to Our Securities

The trading volume of our common stock is limited and our investors may encounter difficulties selling significant quantities of our stock without adversely impacting the price at which they can sell.

Since listing with the NASDAQ in May of 2006, the trading volume for our stock has varied significantly from day to day and often the number of shares traded has been low. Any large transactions in our common stock might be difficult to conduct and may cause significant fluctuations in the price of our common stock.

The prices at which shares of our common stock are traded will likely be volatile.

You should expect the prices at which our common stock is traded to be highly volatile. From the commencement of NASDAQ trading in May 2006 through August 7, 2009, the per share price of our common stock has varied from a low of \$1.09 to a high of \$8.41. We expect continued volatility in the price of our common stock that will make it difficult to predict the value of your investment, to sell your shares at a profit at any given time, or to plan purchases and sales in advance. A variety of other factors might also affect the market price of our common stock. These include, but are not limited to:

- publicity regarding actual or potential clinical results relating to products under development by our competitors or us;
- delays or failures in initiating, completing or analyzing pre-clinical or clinical trials or the unsatisfactory design or results of these trials;
- success or delays in the commercialization of our product candidates;
- market acceptance of our product candidates;
- achievement or rejection of regulatory approvals by our competitors or us;
- announcements of technological innovations or new commercial products by our competitors or us;
- developments concerning proprietary rights, including patents;
- developments concerning our collaborations;
- regulatory developments in the United States and foreign countries;
- economic or other crises and other external factors;
- period-to-period fluctuations in our results of operations;
- changes in financial estimates by securities analysts; and
- sales of our common stock.

We will not be able to control many of these factors, and we believe that period-to-period comparisons of our financial results will not necessarily be indicative of our future performance.

In addition, the stock market in general, and the market for biotechnology companies in particular, has experienced extreme price and volume fluctuations that might have been unrelated or disproportionate to the operating performance of individual companies. These broad market and industry factors might seriously harm the market price of our common stock, regardless of our operating performance.

We have never paid dividends and do not intend to pay cash dividends.

We currently anticipate that no cash dividends will be paid on our common stock in the foreseeable future. While our dividend policy will be based on the operating results and capital needs of the business, it is anticipated that all earnings, if any, will be retained to finance our future operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

The SEC encourages companies to disclose forward-looking information so that investors can better understand a company’s future prospects and make informed investment decisions. This prospectus and the documents we have filed with the SEC that are incorporated herein by reference contain such “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995.

Words such as “may,” “might,” “should,” “anticipate,” “estimate,” “expect,” “projects,” “intends,” “plans,” “believes” and words and terms of similar substance used in connection with any discussion of future operating or financial performance, identify forward-looking statements. Forward-looking statements represent management’s current judgment regarding future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. These risks include, but are not limited to, risks and uncertainties regarding our ability to conduct clinical trials of our product candidates and the results of such trials, our preclinical studies, as well as risks and uncertainties relating to future capital needs, government regulation and third-party reimbursement, economic conditions, markets, products, competition, intellectual property, services and prices, key employees, dependence on our collaborators, litigation and other factors. Please also see the discussion of risks and uncertainties under “Risk Factors” above and contained in any supplements to this prospectus, and in our most recent annual report on Form 10-K, as revised or supplemented by our most recent quarterly report on Form 10-Q, as well as any amendments thereto, as filed with the SEC and which are incorporated herein by reference.

In light of these assumptions, risks and uncertainties, the results and events discussed in the forward-looking statements contained in this prospectus or in any document incorporated herein by reference might not occur. Investors are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this prospectus or the date of the document incorporated by reference in this prospectus. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to us or to any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

USE OF PROCEEDS

We cannot assure you that we will receive any proceeds in connection with securities offered pursuant to this prospectus. Unless otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities under this prospectus for general corporate purposes, including commercialization of our product candidates, clinical trials, research and development expenses, general and administrative expenses, and potential acquisitions of companies, products and technologies that complement our business. We will set forth in the prospectus supplement our intended use for the net proceeds received from the sale of any securities. Pending the application of the net proceeds, we intend to invest the net proceeds generally in short-term, investment grade, interest bearing securities.

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges for each of the periods presented. Our earnings were insufficient to cover fixed charges for each of the periods presented. Because of the deficiency, the ratio information is not applicable. The extent to which earnings were insufficient to cover fixed charges is shown below. Amounts shown are in thousands.

	Six Months	Year Ended December 31				
	Ended June 30, 2009	2008	2007	2006	2005	2004
Deficiency of earnings available to cover fixed charges	\$ (12,712)	\$(35,086)	\$(15,081)	\$(8,671)	\$(7,916)	\$(3,017)

For purposes of computing the deficiency of earnings available to cover fixed charges, fixed charges represent interest expense, the portion of operating lease rental expense that is representative of interest and amortization of discount related to indebtedness.

PLAN OF DISTRIBUTION

We may offer securities under this prospectus from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities (1) through underwriters or dealers, (2) through agents or (3) directly to one or more purchasers, or through a combination of such methods. We may distribute the securities from time to time in one or more transactions at:

- a fixed price or prices, which may be changed;
- market prices prevailing at the time of sale;
- prices related to the prevailing market prices; or
- negotiated prices.

We may directly solicit offers to purchase the securities being offered by this prospectus. We may also designate agents to solicit offers to purchase the securities from time to time. We will name in a prospectus supplement any underwriter or agent involved in the offer or sale of the securities.

If we utilize a dealer in the sale of the securities being offered by 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.

If we utilize an underwriter in the sale of the securities being offered by this prospectus, we will execute an underwriting agreement with the underwriter at the time of sale, and we will provide the name of any underwriter in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we, or the purchasers of the securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and the underwriter may compensate those dealers in the form of discounts, concessions or commissions.

With respect to underwritten public offerings, negotiated transactions and block trades, we will provide in the applicable prospectus supplement any compensation we pay to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended, which we refer to herein as the Securities Act, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof.

Shares of our common stock sold pursuant to the registration statement of which this prospectus is a part will be authorized for quotation and trading on the NASDAQ National Market. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the NASDAQ National Market or any securities market or other securities exchange of the securities covered by the prospectus supplement. To facilitate the offering of the securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than we sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing the applicable security in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if the securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

The underwriters, dealers and agents may engage in other transactions with us, or perform other services for us, in the ordinary course of their business.

DESCRIPTION OF COMMON STOCK

Pursuant to our certificate of incorporation, we are authorized to issue 60,000,000 shares of common stock, \$0.0001 par value per share. As of August 6, 2009, we had 33,436,479 shares of common stock outstanding and approximately 715 stockholders of record.

The following summary of certain provisions of our common stock does not purport to be complete. You should refer to our certificate of incorporation and our bylaws, both of which are included as exhibits to the registration statement we have filed with the SEC in connection with this offering. The summary below is also qualified by provisions of applicable law.

General

The holders of our common stock are entitled to one vote per share on all matters to be voted on by the stockholders, and there are no cumulative voting rights. Generally, all matters to be voted on by stockholders must be approved by a majority (or, in the case of election of directors, by a plurality) of the votes entitled to be cast by all shares of common stock present in person or represented by proxy, subject to any voting rights granted to holders of any preferred stock.

The holders of common stock are entitled to receive ratable dividends, if any, payable in cash, in stock or otherwise if, as and when declared from time to time by our board of directors out of funds legally available for the payment of dividends, subject to any preferential rights that may be applicable to any outstanding preferred stock. In the event of a liquidation, dissolution, or winding up of our company, after payment in full of all outstanding debts and other liabilities, the holders of common stock are entitled to share ratably in all remaining assets, subject to prior distribution rights of preferred stock, if any, then outstanding. No shares of common stock have preemptive rights or other subscription rights to purchase additional shares of common stock. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable, and the shares of common stock included in this registration statement will be fully paid and nonassessable. The rights, preferences and privileges of holders of our common stock will be subject to, and might be adversely affected by, the rights of holders of any preferred stock that we may issue in the future. All shares of common stock that are acquired by us shall be available for reissuance by us at any time.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Corporate Stock Transfer, Inc.

NASDAQ Capital Market

Our common stock is listed for quotation on the NASDAQ Capital Market under the symbol "CHTP." On August 7, 2009, the last reported sale price of our common stock was \$4.68 per share. Effective June 29, 2009, our common stock was added to the Russell 3000 and Russell 2000 Indexes. These Indexes are reconstituted annually and our common stock might not remain in either of the Indexes.

DESCRIPTION OF PREFERRED STOCK

Our board of directors has the authority, without further action by the stockholders, to issue up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, without any further

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vote or action by our stockholders. As of the date of this prospectus, no shares of preferred stock were outstanding. The issuance of preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation and could have the effect of delaying, deferring or preventing a change in control of our company.

We will fix the rights, preferences, privileges and restrictions of the preferred stock of each series in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. This description will include any or all of the following, as required:

- the title and stated value;
- the number of shares we are offering;
- the liquidation preference per share;
- the purchase price;
- the dividend rate, period and payment date and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price, or how it will be calculated, and the exchange period;
- voting rights, if any, of the preferred stock;
- preemptive rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- whether interests in the preferred stock will be represented by depositary shares;
- a discussion of any material or special United States federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

If we issue shares of preferred stock under this prospectus, the shares will be fully paid and non-assessable.

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The General Corporation Law of the State of Delaware, the state of our incorporation, provides that the holders of preferred stock will have the right to vote separately as a class on any proposal involving fundamental changes in the rights of holders of that preferred stock. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. Preferred stock could be issued quickly with terms designed to delay or prevent a change in control of our company or make removal of management more difficult. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provision of any debt securities that we may offer under this prospectus. While the terms we have summarized below will apply generally to any future debt securities we may offer, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities we may offer under a prospectus supplement may differ from the terms described below. For any debt securities that we may offer, an indenture (and any relevant supplemental indenture) will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement that includes this prospectus, or as an exhibit to a current report on Form 8-K, incorporated by reference in this prospectus.

With respect to any debt securities that we issue, we will issue such debt securities under an indenture, which we would enter into with the trustee named in the indenture. Any indenture would be qualified under the Trust Indenture Act of 1939.

With respect to any debt securities that we issue, we will describe in each prospectus supplement the following terms relating to a series of debt securities:

- the title;
- the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;
- any limit on the amount that may be issued;
- whether or not we will issue the series of debt securities in global form, and if so, the terms and who the depository will be;
- the maturity date;
- the principal amount due at maturity;
- whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;
- the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- whether or not the debt securities will be convertible into shares of our common stock or our preferred stock and, if so, the terms of such conversion;
- whether or not the debt securities will be secured or unsecured by some or all of our assets, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place where payments will be payable;
- restrictions on transfer, sale or other assignment, if any;

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- our right, if any, to defer payment or interest and the maximum length of any such deferral period;
- the date, if any, after which and the conditions upon which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemptions provisions;
- the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder’s option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- whether the indenture will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves;
- whether we will be restricted from incurring any additional indebtedness, issuing additional securities, or entering into a merger, consolidation or sale of our business;
- a discussion of any material or special United States federal income tax considerations applicable to the debt securities;
- information describing any book-entry features;
- any provisions for payment of additional amounts for taxes;
- whether the debt securities are to be offered at a price such that they will be deemed to be offered at an “original issue discount” as defined in paragraph (a) of Section 1273 of the Internal Revenue Code of 1986, as amended;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;
- events of default;
- whether we and/or the debenture trustee may change an indenture without the consent of any holders;
- the form of debt security and how it may be exchanged and transferred;
- description of the debenture trustee and paying agent, and the method of payments; and
- any other specified terms, preferences, rights or limitations of, or restrictions on, the debt securities and any terms that may be required by us or advisable under applicable laws or regulations.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplement, summarizes the material terms and provisions of any warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. With respect to any warrants that we offer, specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement that includes this prospectus or as an exhibit to a current report on Form 8-K, incorporated by reference in this prospectus:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- if applicable, the exercise price for shares of our common stock or preferred stock and the number of shares of common stock or preferred stock to be received upon exercise of the warrants;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;

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- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or the common stock issuable upon exercise of the warrants on any securities exchange;
- if applicable, the date from and after which the warrants and the common stock will be separately transferable;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of the warrants, if any;
- any redemption or call provisions;
- whether the warrants are to be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

DESCRIPTION OF UNITS

We might issue units comprised of one or more debt securities, shares of common stock, shares of preferred stock and warrants in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of unit agreement, warrant and any supplemental agreements that describe the terms of the series of units we are offering before the issuance of the related series of units.

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We may choose to evidence each series of units by unit certificates that we would issue under a separate agreement. If we choose to evidence the units by unit certificates, we will enter into the unit agreements with a unit agent and will indicate the name and address of the unit agent in the applicable prospectus supplement relating to the particular series of units.

CERTAIN PROVISIONS OF DELAWARE LAW AND OF THE COMPANY'S CERTIFICATE OF INCORPORATION AND BYLAWS

Certain provisions of Delaware law and our certificate of incorporation and bylaws discussed below may have the effect of making more difficult or discouraging a tender offer, proxy contest or other takeover attempt. These provisions are expected to encourage persons seeking to acquire control of our company to first negotiate with our board of directors. We believe that the benefits of increasing our ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Delaware anti-takeover law

We are subject to Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years following the date the person became an interested stockholder, unless:

- the board of directors approves the transaction in which the stockholder became an interested stockholder prior to the date the interested stockholder attained that status;
- when the stockholder became an interested stockholder, he or she owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding shares owned by persons who are directors and also officers and certain shares owned by employee benefits plans; or
- on or subsequent to the date the business combination is approved by the board of directors, the business combination is authorized by the affirmative vote of at least 66 2/3% of the voting stock of the corporation at an annual or special meeting of stockholders.

Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns, or is an affiliate or associate of the corporation and within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock.

Our certificate of incorporation provides that Jason Stein, Michael Weiser, the Rosenwald 2000 Family Trust, the Lindsay A. Rosenwald 2000 (Delaware) Irrevocable Indenture of Trust, the Lindsay A. Rosenwald Alaska Irrevocable Indenture of Trust, the Lindsay A. Rosenwald Rhode Island Irrevocable Indenture of Trust or the Lindsay A. Rosenwald Nevada Irrevocable Indenture of Trust, or any successor to all or substantially all of their assets, or any affiliate thereof, or any person or entity to which any of the foregoing stockholders transfers shares of our voting stock in a transaction other than an underwritten, broadly distributed public offering, regardless of the total percentage of our voting stock owned by such stockholder or such person or entity, shall not be deemed an "interested stockholder" for purposes of Section 203 of the Delaware General Corporation Law.

The existence of this provision would be expected to have an anti-takeover effect with respect to transactions not approved in advance by our board of directors, including discouraging attempts that might result in a premium over the market price for the shares of our common stock.

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Advance notice requirement for stockholder proposals

Our bylaws contain an advance notice procedure for stockholders' proposals to be brought before a meeting of stockholders, including any proposed nominations of persons for election to our board of directors. Stockholders at a meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting, who has given to our secretary timely written notice, in proper form, of the stockholder's intention to bring that business before the meeting, and who has otherwise complied with our bylaws. Although the bylaws do not give our board of directors the power to approve or disapprove stockholder nominations of candidates for election to our board of directors or proposals regarding other business to be conducted at a special or annual meeting of the stockholders, the bylaws may have the effect of precluding the conduct of business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of our company. By requiring advance notice of other proposed business, the stockholder advance notice procedure will also provide a more orderly procedure for conducting annual meeting of stockholders and, to the extent deemed necessary or desirable by the board of directors, will provide the board of directors with an opportunity to inform stockholders, prior to such meetings, of any business proposed to be conducted at such meetings, together with any recommendations as to the board of directors' position regarding action to be taken with respect to such business, so that stockholders can better decide whether to attend such a meeting or to grant a proxy regarding the disposition of any such business.

LEGAL MATTERS

The validity of the securities being offered hereby will be passed upon by Wyrick Robbins Yates & Ponton, LLP, Raleigh, North Carolina. As a result of an investment in our December 2004 private placement by a fund affiliated with the firm, individual partners of Wyrick Robbins own a total of approximately 6,000 shares of our common stock.

EXPERTS

The consolidated financial statements of Chelsea Therapeutics International, Ltd. and Subsidiary appearing in Chelsea Therapeutics International, Ltd.'s Annual Report (Form 10-K) for the year ended December 31, 2008, and the effectiveness of Chelsea Therapeutics International, Ltd. and Subsidiary's internal control over financial reporting as of December 31, 2008, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements), included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements for the years ended December 31, 2007 and 2006, incorporated in this prospectus by reference to our Annual Report on Form 10-K for the year ended December 31, 2008, have been audited by J.H. Cohn, LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference, and has been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference facilities at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference facilities. SEC filings are also available at the SEC's web site at <http://www.sec.gov>. Our common stock is listed on the NASDAQ Capital Market, and you can read and inspect our filings at the offices of NASDAQ at One Liberty Plaza, 165 Broadway, New York, New York.

This prospectus is only part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act of 1933, as amended, and therefore omits certain information contained in the registration statement. We have also filed exhibits and schedules with the registration statement that are excluded from this

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prospectus, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document. You may inspect a copy of the registration statement, including the exhibits and schedules, without charge, at the public reference room or obtain a copy from the SEC upon payment of the fees prescribed by the SEC.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We filed a registration statement on Form S-3 under the Securities Act of 1933, as amended, with the SEC with respect to the securities being offered pursuant to this prospectus. This prospectus omits certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement, including the exhibits, for further information about us and the securities being offered pursuant to this prospectus. Statements in this prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed above in “Where You Can Find More Information.” The documents we are incorporating by reference are:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2008, filed with the SEC on March 4, 2009;
- our Quarterly Reports on Form 10-Q for the three-month periods ended March 31, 2009 and June 30, 2009, filed with the SEC on May 6, 2009 and August 5, 2009, respectively;
- our Current Reports on Form 8-K filed with the SEC on May 7, 2009, July 23, July 28 and July 29, 2009;
- our definitive proxy solicitation materials filed with the SEC on April 27, 2009;
- the description of our common stock contained in our registration statement on Form 8-A (File No. 000-51462), including any amendment or report filed for the purpose of updating such description; and
- all of the filings pursuant to the Securities Exchange Act of 1934, as amended, after the date of the filing of the original registration statement and prior to the effectiveness of the registration statement.

In addition, all documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, before the date our offering is terminated or completed are deemed to be incorporated by reference into, and to be a part of, this prospectus.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to Chelsea Therapeutics International, Ltd., Attention: Corporate Secretary, 3530 Toringdon Way, Suite 200, Charlotte, North Carolina 27277, (704) 341-1516.

You should rely only on information contained in, or incorporated by reference into, this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference in this prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

We estimate that expenses payable by us in connection with the offering described in this registration statement will be as follows:

SEC registration fee	\$ 3,348
Legal fees and expenses	\$ 75,000*
Accounting fees and expenses	\$ 25,000*
Printing expenses	\$ 15,000*
Miscellaneous	\$ 11,653*
Total	\$130,000*

* Estimated as permitted under Rule 511 of Regulation S-K.

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Item 15. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law (the “DGCL”) provides, in effect, that any person made a party to any action by reason of the fact that he is or was a director, officer, employee or agent of the Registrant may and, in certain cases, must be indemnified by the Registrant against, in the case of a non-derivative action, judgments, fines, amounts paid in settlement and reasonable expenses (including attorneys’ fees) incurred by him as a result of such action, and in the case of a derivative action, against expenses (including attorneys’ fees), if in either type of action he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Registrant. This indemnification does not apply, in a derivative action, to matters as to which it is adjudged that the director, officer, employee or agent is liable to the Registrant, unless upon court order it is determined that, despite such adjudication of liability, but in view of all the circumstances of the case, he is fairly and reasonably entitled to indemnity for expenses, and, in a non-derivative action, to any criminal proceeding in which such person had reasonable cause to believe his conduct was unlawful.

The Registrant’s certificate of incorporation provides that no director of the Registrant shall be liable to the Registrant or its stockholders for monetary damages for breach of fiduciary duty as a director to the fullest extent permitted by the DGCL.

The Registrant’s certificate of incorporation also provides that the Registrant shall indemnify to the fullest extent permitted by Delaware law any and all of its directors and officers, or former directors and officers, or any person who may have served at the registrant’s request as a director or officer of another corporation, partnership, joint venture, trust or other enterprise.

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Item 16. Exhibits.

(a) The following exhibits are filed as part of this Registration Statement:

<u>Exhibit Number</u>	<u>Description of Document</u>	<u>Registrant's</u>		<u>Exhibit Number</u>	<u>Filed Herewith</u>
		<u>Form</u>	<u>Dated</u>		
1.1*	Form of Underwriting Agreement.				
3.1	Certificate of Incorporation for Chelsea Therapeutics, Ltd.	S-1	08/18/05	3.1	
3.2	Bylaws of Chelsea Therapeutics International, Ltd.	S-1	08/18/05	3.2	
4.1	Specimen Common Stock Certificate.				X
4.2 *	Specimen Preferred Stock Certificate and Form of Certificate of Designation of Preferred Stock.				
4.3 *	Form of Indenture.				
4.4 *	Form of Note.				
4.5 *	Form of Common Stock Warrant Agreement and Warrant Certificate.				
4.6 *	Form of Preferred Stock Warrant Agreement and Warrant Certificate.				
4.7 *	Form of Debt Securities Warrant Agreement and Warrant Certificate.				
4.8 *	Form of Unit Agreement.				
5.1	Opinion of Wyrick Robbins Yates & Ponton LLP.				X
10.1**	License Agreement dated as of March 24, 2004 between M. Gopal Nair and Chelsea Therapeutics, Inc. (f/k/a Aspen Therapeutics, Inc.).	8-K	02/16/05	10.1	
10.3	Form of Subscription Agreement for the purchase of Series A Preferred Stock of Chelsea Therapeutics, Inc.	8-K	02/16/05	10.3	
10.4	Chelsea Therapeutics, Inc. 2004 Stock Plan and forms of Notice of Stock Option Grant and Stock Option Agreement.	8-K	02/16/05	10.4	
10.5	Form of Subscription Agreement and warrant for the purchase of common stock, par value \$0.0001 per share, of Chelsea Therapeutics International, Ltd.	8-K	02/17/06	10.5	
10.6	Placement Agency Agreement dated November 28, 2005 between Chelsea Therapeutics International, Ltd. and Paramount BioCapital, Inc.	10-K	03/08/06	10.6	
10.8**	Development and Commercialization Agreement dated as of May 5, 2006 between Active Biotech and Chelsea Therapeutics International, Ltd.	10-Q	08/14/06	10.8	
10.9**	Exclusive License Agreement dated May 26, 2006 between Dainippon Sumitomo Pharma Co., Ltd. and Chelsea Therapeutics, Inc.	10-Q	08/14/06	10.9	
10.10**	Finder's Agreement dated May 26, 2006 between Paramount BioCapital, Inc. and Chelsea Therapeutics International, Ltd.	10-Q	08/14/06	10.9	
10.11	Form of Subscription Agreement for the purchase of common stock of Chelsea Therapeutics, Ltd. dated March 19, 2009 and related form of Warrant dated March 22, 2007.	8-K	03/20/07	10.11	

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10.12	Form of Subscription Agreement for the purchase of common stock of Chelsea Therapeutics International, Ltd. dated November 1, 2007.	8-K	11/02/07	10.12	
10.13	Employment Agreement dated May 1, 2009 between Chelsea Therapeutics International, Ltd. and Simon Pedder.	8-K	5/7/09	10.13	
10.14	Form of Subscription Agreement for the purchase of common stock of Chelsea Therapeutics International, Ltd.	8-K	7/23/09	10.14	
12.1	Statement of Computation of Ratio of Earnings to Fixed Charges.				X
21.1	Subsidiaries of Chelsea Therapeutics International, Ltd.	10-K	3/12/07	21.1	
23.1	Consent of Ernst & Young LLP.				X
23.2	Consent of J.H. Cohn LLP.				X
23.3	Consent of Wyrick Robbins Yates & Ponton LLP (included as part of Exhibit 5.1).				X
24.1	Power of Attorney (included in the signature pages hereto).				X
25.1*	Statement of Eligibility of Trustee.				

* To be filed by amendment.

** The Registrant received confidential treatment with respect to certain portions of this exhibit. Such portions have been omitted from this exhibit and have been filed separately with the SEC.

(b) None.

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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;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) above 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 and 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, 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 to any purchaser:

(i) 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

(ii) 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 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.

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(5) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of section 310 of the Trust Indenture Act (“Act”) in accordance with the rules and regulations prescribed by the Commission under section 305(b)(2) of the Act.

(6) That, for the purpose of determining liability of the Registrant under the Securities Act 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, each filing of the Registrant’s annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan’s annual report pursuant to Section 15(d) of the Exchange Act) 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 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 SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(d) The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, 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 shall be deemed to be part of this registration statement as of the time it was declared effective; and

(2) For purposes of determining any liability under the Securities Act, 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.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Charlotte, State of North Carolina, on August 10, 2009.

**CHELSEA THERAPEUTICS INTERNATIONAL,
LTD.**

By: /s/ Simon Pedder

Simon Pedder, Ph.D.

President and Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned officers and directors of Chelsea Therapeutics International, Ltd., do hereby constitute and appoint Simon Pedder and J. Nick Riehle, or either of them, our true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Registration Statement, and to file the same, with exhibits thereto, and other documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite are necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that each of said attorney-in-fact and agents, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement on Form S-3 has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Capacity</u>	<u>Date</u>
<u>/s/ Simon Pedder</u> Simon Pedder, Ph.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	August 10, 2009
<u>/s/ J. Nick Riehle</u> J. Nick Riehle	Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	August 10, 2009
<u>/s/ Kevan Clemens</u> Kevan Clemens, Ph.D.	Director	August 10, 2009
<u>/s/ Norman Hardman</u> Norman Hardman, Ph.D.	Director	August 10, 2009
<u>/s/ Johnson Y. N. Lau</u> Johnson Y. N. Lau, M.D.	Director	August 10, 2009
<u>/s/ William D. Rueckert</u> William D. Rueckert	Director	August 10, 2009
<u>William D. Schwieterman, M.D.</u>	Director	August __, 2009
<u>Roger Stoll, Ph.D.</u>	Director	August __, 2009
<u>/s/ Michael Weiser</u> Michael Weiser, M.D., Ph.D.	Director	August 10, 2009



CHELSEA THERAPEUTICS INTERNATIONAL, LTD.

CORPORATE STOCK TRANSFER, INC.

TRANSFER FEE: AS REQUIRED

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM - as tenants in common
TEN ENT - as tenants by the entireties
JT TEN - as joint tenants with right
of survivorship and not as
tenants in common

UNIF GIFT MIN ACT - _____
Custodian
(Cost) (Minor)
under Uniform Gifts to Minors

Act _____
(State)

Additional abbreviations may also be used though not in the above list.

PLEASE INSERT SOCIAL SECURITY OR OTHER
IDENTIFYING NUMBER OF ASSIGNEE

FOR VALUE RECEIVED, _____ hereby sell, assign and transfer unto

PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS INCLUDING POSTAL ZIP CODE OF ASSIGNEE

_____ Shares
of the Common Stock represented by the within Certificate and do hereby irrevocably constitute and appoint

_____ Attorney to transfer
the said stock on the books of the within-named Corporation, with full power of substitution in the premises.

Dated: _____ 20 _____

Signature(s) Guaranteed:

Signature: X _____

Signature: X _____

THE SIGNATURE(S) TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME(S) AS WRITTEN UPON THE FACE OF THE CERTIFICATE IN EVERY PARTICULAR, WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATSOEVER. THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions) WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO S.E.C. RULE 17Ad-15.

Wyrick Robbins Yates & Ponton LLP
4101 Lake Boone Trail, Suite 300
Raleigh, North Carolina 27607

August 10, 2009

Board of Directors
Chelsea Therapeutics International, Ltd.
3530 Toringdon Way, Suite 200
Charlotte, North Carolina 28277

Ladies and Gentlemen:

We have acted as counsel to Chelsea Therapeutics International, Ltd., a Delaware corporation (the "Company"), in connection with the registration statement on Form S-3, as filed by the Company with the Securities and Exchange Commission (the "Commission") on the date hereof (the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Act"), relating to up to \$60,000,000 of one or more of the following securities (collectively, the "Offered Securities") which may be issued by the Company, from time to time, under the Registration Statement: (i) shares of the Company's common stock, \$0.0001 par value per share (the "Common Stock"), which may include shares of Common Stock issuable upon the conversion or exercise of the other Offered Securities included in the Registration Statement, (ii) shares of the Company's preferred stock, \$0.0001 par value per share (the "Preferred Stock"), which may include shares of Preferred Stock issuable upon the conversion or exercise of the Debt Securities and Warrants (as defined herein) included in the Registration Statement, (iii) debt securities (the "Debt Securities"), the terms of which will be determined by the Board of Directors of the Company prior to the issuance thereof, (iv) warrants (the "Warrants") to purchase Common Stock, Preferred Stock or Debt Securities, and (v) unit ("Units") comprised of any combination of the foregoing Offered Securities. The Offered Securities may be issued and sold by the Company from time to time as set forth in the Registration Statement, any amendment thereto, and the prospectus contained therein and any supplements thereto filed pursuant to Rule 415 of the rules and regulations promulgated under the Securities Act.

This opinion is being furnished in accordance with the requirements of Item 16 of Form S-3 and Item 601(b)(5)(i) of Regulation S-K.

In connection with the foregoing, we have relied upon, among other things, our examination of such documents, records of the Company and certificates of its officers and public officials as we deemed necessary for purposes of the opinions expressed below. In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the conformity with the original of all documents submitted to us as copies thereof.

Based upon the foregoing, we are of the opinion that:

1. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware.

2. With respect to any offering of Common Stock by the Company pursuant to the Registration Statement (the "Offered Common Stock"), when (a) the Registration Statement has become effective under the Securities Act, (b) the board of directors or any duly designated committee thereof has adopted resolutions approving the issuance and sale of the Offered Common Stock at a specified price or pursuant to a specified pricing mechanism, (c) if the Offered Common Stock is to be sold in a firm commitment underwritten offering or in a best efforts placement offering, an underwriting agreement or placement agency agreement with respect to the Offered Common Stock has been duly authorized, executed and delivered by the Company and the other parties thereto, (d) certificates representing the shares of Offered Common Stock have been duly executed by appropriate officers of the Company or appropriate book entries have been made in the stock records of the Company, and (e) the shares of

Offered Common Stock have been duly and properly sold, paid for and delivered as contemplated in the Registration Statement, any prospectus supplement relating thereto and, if applicable, in accordance with the applicable underwriting or other purchase agreement, the shares of Offered Common Stock, will be duly authorized, validly issued, fully paid and non-assessable.

3. With respect to any offering of Preferred Stock by the Company pursuant to the Registration Statement (the “Offered Preferred Stock”), when (a) the Registration Statement has become effective under the Securities Act, (b) the board of directors or any duly designated committee thereof has adopted resolutions approving the issuance and sale of the Offered Preferred Stock at a specified price or pursuant to a specified pricing mechanism, (c) a certificate of designation with respect to the Offered Preferred Stock has been filed with and accepted for filing by the Delaware Secretary of State, (d) if the Offered Preferred Stock is to be sold in a firm commitment underwritten offering or in a best efforts placement offering, an underwriting agreement or placement agency agreement with respect to the Offered Preferred Stock has been duly authorized, executed and delivered by the Company and the other parties thereto, (e) certificates representing the shares of Offered Preferred Stock have been duly executed by appropriate officers of the Company or appropriate book entries have been made in the stock records of the Company, and (f) the shares of Offered Preferred Stock have been duly and properly sold, paid for and delivered as contemplated in the Registration Statement, any prospectus supplement relating thereto and, if applicable, in accordance with the applicable underwriting or other purchase agreement, the shares of Offered Preferred Stock, will be duly authorized, validly issued, fully paid and non-assessable

4. With respect to any series of the Debt Securities offered under the Registration Statement, provided that (a) the Registration Statement has become effective under the Securities Act; (b) an indenture has been duly authorized and executed by the Company and the applicable trustee by all necessary corporate action; (c) the issuance and terms of the Debt Securities have been duly authorized by the Company by all necessary corporate action; (d) the terms of the Debt Securities and of their issuance and sale have been duly established in conformity with the indenture so as not to violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company, so as to be in conformity with the Certificate of Incorporation and Bylaws, and so as to comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (e) the Debt Securities have been duly executed and delivered by the Company and authenticated by the applicable trustee pursuant to the indenture and delivered against payment therefor, then the Debt Securities, when issued and sold in accordance with the indenture and a duly authorized, executed and delivered purchase, underwriting or similar agreement, or upon exercise of any Warrants under the Warrant Agreement, will be valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, except as enforcement thereof may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors’ rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance.

5. With respect to any offering of Warrants by the Company pursuant to the Registration Statement (the “Offered Warrants”), when (a) the Registration Statement has become effective under the Securities Act, (b) the board of directors or any duly designated committee thereof has adopted resolutions approving the form, terms, issuance and sale of the Offered Warrants at a specified price or pursuant to a specified pricing mechanism, (c) if the Offered Warrants are to be sold in a firm commitment underwritten offering or in a best efforts placement offering, an underwriting agreement or placement agency agreement with respect to the Offered Warrants has been duly authorized, executed and delivered by the Company and the other parties thereto, and (d) the Offered Warrants have been duly and properly sold, paid for and delivered as contemplated in the Registration Statement, any prospectus supplement relating thereto and, if applicable, in accordance with the applicable underwriting or other purchase agreement and otherwise in accordance with the provisions of any applicable warrant agreement (the “Warrant Agreement”) between the Company and the purchaser or warrant agent named therein, the Offered Warrants will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

6. With respect to any offering of Units by the Company pursuant to the Registration Statement (the “Offered Units”), when (a) the Registration Statement has become effective under the Securities Act, (b) when the board of directors has taken all necessary corporate action to authorize and approve the form, issuance, execution and terms of the Offered Units, the related unit agreements between the Company and the unit agent or purchaser named therein (“Unit Agreements”), if any, and any Offered Securities which are components of such Offered Units, the terms of the offering thereof and related matters, (c) if the Offered Units are to be sold in a firm commitment

underwritten offering or in a best efforts placement offering, an underwriting agreement or placement agency agreement with respect to the Offered Units has been duly authorized, executed and delivered by the Company and the other parties thereto, and (d) the (1) Offered Units, (2) the Unit Agreements, if any, and (3) such Offered Securities that are components of such Offered Units have been duly and properly sold, paid for and delivered as contemplated in the Registration Statement, any prospectus supplement relating thereto and, if applicable, in accordance with the applicable underwriting or other purchase agreement and otherwise in accordance with the provisions of any applicable (i) Unit Agreement and (ii) Warrant Agreement, in the case of Warrants, such Units will be validly issued and will entitle the holder thereof to the rights specified in the Unit Agreements, if any.

This opinion is limited to the Delaware General Corporation Law, including the statutory provisions of the Delaware General Corporate Law and all applicable provisions of the Delaware Constitution and reported judicial decisions interpreting these laws. We hereby consent to the filing of this opinion with the Commission as Exhibit 5.1 to the Registration Statement and reference to our firm under the heading "Legal Matters" in the Prospectus included therein. In giving this consent, we do not admit that we are within the category of persons whose consent is required by Section 7 of the Securities Act or the rules and regulations promulgated thereunder by the Commission.

Very truly yours,

/s/ Wyrick Robbins Yates & Ponton LLP

CHELSEA THERAPEUTICS INTERNATIONAL, LTD
COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES
(Amounts in thousands)

	For the Years Ended December 31,					Six Months
	2004	2005	2006	2007	2008	Ended June 30, 2009
Earnings:						
Loss before income taxes	\$(3,017)	\$(7,916)	\$(8,671)	\$(15,081)	\$(35,086)	\$(12,712)
Plus: Fixed charges	43	18	19	20	66	83
Less: Capitalized interest	—	—	—	—	—	—
Earnings as adjusted	(2,974)	(7,898)	(8,652)	(15,061)	(35,020)	(12,629)
Fixed charges:						
Interest expense	34	—	—	—	5	41
Amortization of debt issuance costs	—	—	—	—	—	—
Interest portion of rental expense	9	18	19	20	61	42
Total fixed charges	\$ 43	\$ 18	\$ 19	\$ 20	\$ 66	\$ 83
Ratio of earnings to fixed charges ⁽¹⁾	—	—	—	—	—	—
Deficiency of earnings available to cover fixed charges ⁽²⁾	\$(3,017)	\$(7,916)	\$(8,671)	\$(15,081)	\$(35,086)	\$(12,712)

- (1) Because we had no earnings in each period, it is not possible to calculate the ratio of combined fixed charges and preference dividends to earnings.
- (2) For purposes of this calculation, “earnings” consist of income (loss) before income taxes and fixed charges. “Fixed charges” consist of interest, amortization of debt issuance costs, preferred stock dividends and the component of rental expense believed by management to be representative of the interest factor for those amounts.

**Consent of Independent Registered
Public Accounting Firm**

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Chelsea Therapeutics International, Ltd. for the registration of \$60,000,000 of common stock, preferred stock, warrants, debt securities and units and to the incorporation by reference therein of our reports dated March 3, 2009, with respect to the consolidated financial statements of Chelsea Therapeutics International, Ltd. and Subsidiary and the effectiveness of internal control over financial reporting of Chelsea Therapeutics International, Ltd. and Subsidiary, included in its Annual Report (Form 10-K) for the year ended December 31, 2008, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Charlotte, North Carolina
August 10, 2009

**Consent of Independent Registered
Public Accounting Firm**

We consent to the incorporation by reference in the Registration Statement (Form S-3) of Chelsea Therapeutics International, Ltd. of our report dated March 10, 2008, with respect to the consolidated financial statements of Chelsea Therapeutics International, Ltd. and Subsidiary as of December 31, 2007 and for the years ended December 31, 2007 and 2006 and for the period from April 3, 2002 (inception) to December 31, 2007 included in its Annual Report on Form 10-K for the year ended December 31, 2008. We also consent to the reference to our firm under the caption "Experts".

/s/ J. H. Cohn LLP

Roseland, New Jersey
August 10, 2009