

SPECTRUM PHARMACEUTICALS INC

Form 424B5

September 22, 2009

Table of Contents

**PROSPECTUS SUPPLEMENT NO. 6
(TO PROSPECTUS DATED MAY 5, 2008)**

**Filed Pursuant to Rule 424(b)(5)
Registration Statement No. 333-150260**

**6,622,517 Units
Spectrum Pharmaceuticals, Inc.
Units Consisting of
One Share of Common Stock and
a Warrant to Purchase 0.40 of a Share of Common Stock**

We are offering 6,622,517 units, with each unit consisting of one share of our common stock and a warrant to purchase 0.40 of a share of our common stock (and the shares of common stock issuable from time to time upon exercise of the offered warrants), to certain institutional investors pursuant to this prospectus supplement and the accompanying prospectus. The purchase price for each unit is \$7.55. Each warrant has an exercise price of \$7.55 per share, and is exercisable for a period of 90 days commencing 181 days following the closing date of the offering. The shares of common stock and the warrants will be issued separately but will be purchased together in this offering.

The warrants will not be listed on any national securities exchange. Our common stock is listed on the NASDAQ Global Market under the symbol SPPI. On September 17, 2009, the last reported sale price of our common stock on the NASDAQ Global Market was \$7.51 per share.

This investment involves a high degree of risk. Please see the section entitled Risk Factors beginning on page S-3 of this prospectus supplement.

Rodman & Renshaw, LLC acted as the placement agent on this transaction. The placement agent is not purchasing or selling any of these securities nor is it required to sell any specific number or dollar amount of securities, but has agreed to use its reasonable best efforts to sell the securities offered by this prospectus supplement. We have agreed to pay the placement agent the placement agent fees set forth in the table below.

| | Per Unit | Aggregate Offering |
|----------------------------------|-----------------|-------------------------------|
| Public offering price | \$7.55 | \$ 50,000,000 |
| Placement agent fees | \$0.38 | \$ 2,500,000 |
| Proceeds, before expenses, to us | \$7.17 | \$ 47,500,000 |

Delivery of the units will take place no later than September 23, 2009, against payment for such units to be received by us on the same date.

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

**Rodman & Renshaw
The date of this prospectus supplement is September 18, 2009**

Table of Contents**TABLE OF CONTENTS**

Prospectus Supplement

| | |
|--|------|
| <u>ABOUT THIS PROSPECTUS SUPPLEMENT</u> | S-1 |
| <u>ABOUT SPECTRUM PHARMACEUTICALS</u> | S-1 |
| <u>THE OFFERING</u> | S-2 |
| <u>RISK FACTORS</u> | S-3 |
| <u>NOTE REGARDING FORWARD-LOOKING STATEMENTS</u> | S-24 |
| <u>USE OF PROCEEDS</u> | S-24 |
| <u>DILUTION</u> | S-25 |
| <u>DESCRIPTION OF SECURITIES WE ARE OFFERING</u> | S-25 |
| <u>PLAN OF DISTRIBUTION</u> | S-26 |
| <u>LEGAL MATTERS</u> | S-27 |
| <u>EXPERTS</u> | S-28 |
| <u>WHERE YOU CAN FIND MORE INFORMATION</u> | S-28 |
| <u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u> | S-28 |

Prospectus 1

| | |
|--|----|
| <u>ABOUT THIS PROSPECTUS</u> | 3 |
| <u>THE COMPANY</u> | 4 |
| <u>USE OF PROCEEDS</u> | 5 |
| <u>RATIO OF EARNINGS TO FIXED CHARGES</u> | 5 |
| <u>RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED STOCK</u> | |
| <u>DIVIDENDS</u> | 5 |
| <u>FORWARD-LOOKING STATEMENTS</u> | 5 |
| <u>DESCRIPTION OF SECURITIES</u> | 6 |
| <u>DEBT SECURITIES</u> | 6 |
| <u>CAPITAL STOCK</u> | 11 |
| <u>WARRANTS</u> | 14 |
| <u>UNITS</u> | 15 |
| <u>PLAN OF DISTRIBUTION</u> | 15 |
| <u>WHERE YOU CAN FIND MORE INFORMATION</u> | 17 |
| <u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u> | 17 |
| <u>EXPERTS</u> | 18 |
| <u>LEGAL MATTERS</u> | 18 |

You should rely only on information contained in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with information that is different. You should not assume that the information in this prospectus supplement or the accompanying prospectus is accurate as of any date other than the date on the front of this prospectus supplement or the prospectus or that any document that we incorporated by reference in this prospectus supplement or the accompanying prospectus is accurate as of any date other than its filing date. You should not consider this prospectus supplement or the accompanying prospectus to be an offer or solicitation relating to the securities in any jurisdiction in which such an offer or solicitation relating to the securities is not authorized. Furthermore, you should not consider this prospectus supplement or the accompanying prospectus to be an offer or solicitation relating to the securities if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

*This summary highlights selected information about us, this offering and information appearing elsewhere in this prospectus supplement, in the accompanying prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all the information you should consider before investing in our securities pursuant to this prospectus supplement and the accompanying prospectus. You should carefully read this entire prospectus supplement and the accompanying prospectus carefully, including the information referred to under the heading *Risk Factors* in this prospectus supplement and the financial statements and other information that we incorporated by reference in this prospectus supplement and the accompanying prospectus before making an investment decision.*

This prospectus supplement supplements the accompanying prospectus filed with our registration statement on Form S-3 (registration file no. 333-150260) as part of a shelf registration process. Under the shelf registration process, we may offer to sell debt securities, preferred stock, common stock, warrants and units, from time to time in one or more offerings up to a total dollar amount of \$150,000,000.

This prospectus supplement describes the specific terms of this offering and the accompanying prospectus gives more general information, some of which may not apply to this offering. If the description of the offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information contained in this prospectus supplement.

Unless the context otherwise requires, references to *we*, *us* or the *Company* in this prospectus supplement and accompanying prospectus shall refer to Spectrum Pharmaceuticals, Inc. Generally, when we refer to this prospectus we are referring to both this prospectus supplement and the accompanying base prospectus combined.

ABOUT SPECTRUM PHARMACEUTICALS

We are a commercial stage biopharmaceutical company committed to developing and commercializing innovative therapies with a focus primarily in the areas of hematology-oncology and urology. We have a fully developed commercial infrastructure that is responsible for the sales and marketing of two drugs in the United States, namely Fusilev® and Zevalin®. Our lead developmental drug is apaziquone (formerly EOquin®), which is presently being studied in two large Phase 3 clinical trials for non-muscle invasive bladder cancer.

Spectrum Pharmaceuticals, Inc. is a Delaware corporation that was originally incorporated in Colorado as Americus Funding Corporation in December 1987, became NeoTherapeutics, Inc. in August 1996, was reincorporated in Delaware in June 1997, and was renamed Spectrum Pharmaceuticals, Inc. in December 2002. Our principal executive offices are located at 157 Technology Drive, Irvine, California 92618, and our telephone number at that address is (949) 788-6700. Additional information concerning us can be found in our periodic filings with the Securities and Exchange Commission, or the SEC, which are available on our website at www.spectrumpharm.com and on the SEC's website at www.sec.gov.

Table of Contents

THE OFFERING

| | |
|--|--|
| Common stock offered by us: | 6,622,517 shares of common stock. |
| Common stock to be outstanding after this offering: | 48,707,303 shares of common stock. |
| Warrants offered by us: | Warrants to purchase up to 2,649,007 shares of common stock. Each warrant has an exercise price of \$7.55 per share, and is exercisable for a period of 90 days commencing 181 days following the closing date of the offering. This prospectus supplement also relates to the offering of the shares of common stock issuable upon exercise of the warrants. |
| Use of proceeds: | We intend to use the net proceeds from the sale of the securities under this prospectus supplement for general corporate purposes, including, without limitation, sales and marketing activities, clinical development, making acquisitions of assets, companies or securities, capital expenditures and for working capital. Please see the section entitled "Use of Proceeds." |
| NASDAQ Global Market Symbol: | SPPI |
| Risk factors: | This investment involves a high degree of risk. Please see the section entitled "Risk Factors" beginning on page S-3 of this prospectus supplement. |
| The number of shares of our common stock that will be outstanding immediately after the offering is based on 42,084,786 shares of our common stock outstanding as of September 17, 2009. Unless we specifically state otherwise, the share information in this prospectus supplement does not include: | |
| 136,000 shares of common stock issuable upon the conversion of our outstanding Series E convertible preferred stock; | |
| Approximately 8,500,000 shares of common stock issuable upon the exercise of warrants outstanding prior to this offering; | |
| 2,649,007 shares of common stock issuable upon the exercise of warrants to be issued to purchasers in this offering; | |
| Approximately 8,000,000 shares of common stock issuable upon the exercise of stock options outstanding prior to this offering under our equity incentive plans; | |
| Approximately 10,000,000 shares of common stock available for future grants under our equity incentive plans; | |
| 5,000,000 shares of common stock available for future issuance under our Employee Stock Purchase Plan; and | |
| Approximately 140,000 shares of common stock available for issuance under our 401(k) profit-sharing plan. | |

Table of Contents

RISK FACTORS

An investment in our securities involves a high degree of risk. Our business, financial condition, operating results and prospects can be impacted by a number of factors, any one of which could cause our actual results to differ materially from recent results or from our anticipated future results. As a result, the trading price of our common stock and the value of the warrants offered hereby could decline, and you could lose part or all of your investment. You should carefully consider the risks described below with all of the other information included in this prospectus supplement, our Annual Report on Form 10-K for the fiscal year ended December 31, 2008, and our other filings with the SEC, including our quarterly reports on Form 10-Q. Failure to satisfactorily achieve any of our objectives or avoid any of the risks below would likely have a material adverse effect on our business and results of operations.

Risks Related to Our Business

Like other early-stage biotech companies, we have a history of operating losses and our losses may continue to increase as we expand our commercialization and development efforts, and our efforts may never result in profitability.

Our cumulative losses since our inception in 1987 through June 30, 2009 were in excess of \$250 million. Our net losses in 2008 and 2007 were approximately \$15 million and \$34 million, respectively. We expect to continue to incur additional losses as we implement our growth strategy of commercializing our approved drug products and developing our pipeline products for at least the next few years. We may never achieve significant revenues from sales of products or become profitable. Even if we eventually generate significant revenues from sales, we will likely continue to incur losses over the next several years.

Our business does not generate sufficient cash to finance our ongoing operations and therefore, we will likely need to continue to raise additional capital.

Our current commercial operations do not generate sufficient operating cash to finance the clinical development of all our drug products, to commercialize our approved drug products and to capitalize on growth opportunities. While we have been successful recently in generating funds through the licensing and sale of our assets, we have historically relied primarily on raising capital through the sale of our securities and out-licensing our drug products to meet our financial needs. Although we began selling products in 2008, we believe that we may need to continue to raise funds in order to continue drug product commercialization, development and acquisition.

We may not be able to raise additional capital on favorable terms, if at all, particularly with the current volatile financial market conditions. Accordingly, we may be forced to significantly change our business plans and restructure our operations to conserve cash, which would likely involve out-licensing or selling some or all of our intellectual, technological and tangible property not presently contemplated and at terms that we believe would not be favorable to us, and/or reducing the scope and nature of our currently planned drug development and commercialization activities. An inability to raise additional capital would also materially impact our ability to expand operations.

Clinical trials may fail to demonstrate the safety and efficacy of our drug products, which could prevent or significantly delay obtaining regulatory approval.

Prior to receiving approval to commercialize any of our drug products, we must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the United States Food and Drug Administration, or FDA, and other regulatory authorities in the United States and other countries, that each of the products is both safe and effective. For each drug product, we will need to demonstrate its efficacy and monitor its safety throughout the process. If such development is unsuccessful, our business and reputation would be harmed and our stock price would be adversely affected.

Table of Contents

All of our drug products are prone to the risks of failure inherent in drug development. Clinical trials of new drug products sufficient to obtain regulatory marketing approval are expensive and take years to complete. We may not be able to successfully complete clinical testing within the time frame we have planned, or at all. We may experience numerous unforeseen events during, or as a result of, the clinical trial process that could delay or prevent us from receiving regulatory approval or commercializing our drug products. In addition, the results of pre-clinical studies and early-stage clinical trials of our drug products do not necessarily predict the results of later-stage clinical trials. Later-stage clinical trials may fail to demonstrate that a drug product is safe and effective despite having progressed through initial clinical testing. Even if we believe the data collected from clinical trials of our drug products is promising, such data may not be sufficient to support approval by the FDA or any other United States or foreign regulatory approval. Pre-clinical and clinical data can be interpreted in different ways.

Accordingly, FDA officials could interpret such data in different ways than we or our partners do, which could delay, limit or prevent regulatory approval. The FDA, other regulatory authorities, our institutional review boards, our contract research organizations, or we may suspend or terminate our clinical trials for our drug products. Any failure or significant delay in completing clinical trials for our drug products, or in receiving regulatory approval for the sale of any drugs resulting from our drug products, may severely harm our business and reputation. Even if we receive FDA and other regulatory approvals, our drug products may later exhibit adverse effects that may limit or prevent their widespread use, may cause the FDA to revoke, suspend or limit their approval, or may force us to withdraw products derived from those drug products from the market.

If we are unable to effectively maintain and expand our sales and marketing capabilities, we may be unable to successfully commercialize our approved products.

Historically, we have had limited internal experience in selling, marketing or distributing pharmaceutical products. However, we have recently established a small direct sales force to market our approved products. We also are expanding our direct sales force in connection with the re-launch of Zevalin. If we are not able to effectively hire and train qualified individuals as part of our sales force, our product sales and resulting revenues will be negatively impacted.

If we are unable to maintain or obtain improved reimbursement rates for Zevalin, the product's operating results may be harmed, which could adversely affect our financial and operating results.

In 2007, the Centers for Medicare and Medicaid Services, or CMS, implemented new outpatient reimbursement rates for radiopharmaceuticals, including Zevalin. The new reimbursement rates are significantly below the institution or provider's current acquisition cost for Zevalin. Congress has passed legislation to delay the implementation of those new rates and stabilize reimbursement rates through January 1, 2010, with the intention of giving drug manufacturers and CMS time to reach an agreement that more adequately reflects costs associated with affected pharmaceuticals. However, CMS may not agree to a rate or methodology that provides an acceptable reimbursement on radiopharmaceuticals such as Zevalin. In the event that CMS does not agree to a reimbursement rate that is adequate to cover an institution or provider's acquisition cost for Zevalin, we could face significant difficulty in getting care providers to use Zevalin, which would have an adverse impact on the product's expected operating results, and in turn adversely impact our investment in the product and our financial and operating results.

We may face difficulties in achieving broader market acceptance of Zevalin if we do not invest significantly in our sales and marketing infrastructure.

United States sales of Zevalin have declined over the several years prior to our acquisition of the Zevalin assets. We believe that an enhanced sales and marketing strategy for Zevalin, in conjunction with the recent approval by the FDA for an expanded use of Zevalin, has significant potential to increase sales of and revenue from Zevalin over the next few years. However, implementation of the sales and marketing strategy for Zevalin will require a significant investment of financial and other resources by us for the foreseeable future and may not ultimately increase Zevalin sales or allow us to realize the anticipated benefits from our investment in the product. Additionally, our efforts to establish and grow an effective direct sales force for Zevalin will require significant commitments of both financial and management resources by us, and may not ultimately be successful due a variety of factors, including industry competition for effective sales and marketing personnel or the inability of us to dedicate the necessary resources to those efforts.

Table of Contents

The intellectual property and assets owned by our subsidiary, RIT, are subject to a security agreement with Biogen that secures the entity's payment and other obligations to Biogen, and we have guaranteed all of those obligations.

In connection with the formation of RIT Oncology, LLC, or RIT, RIT entered into a security agreement with Biogen Idec, Inc., or Biogen, pursuant to which RIT granted to Biogen a first priority security interest in all of its assets, which consist of the Zevalin-related intellectual property and other assets RIT. The security agreement secures certain payment, indemnification and other obligations of RIT to Biogen related to Zevalin. If RIT were to default on certain of its obligations to Biogen, or in certain other circumstances generally related to a bankruptcy or insolvency of RIT, Biogen could seek to foreclose on the collateral under the security agreement to obtain satisfaction of RIT's obligations to it. If RIT were to default on its obligations to Biogen, and Biogen were to foreclose on the collateral under the security agreement, RIT's business could be materially and adversely impacted, which could in turn materially and adversely impact our investment in RIT and our financial condition and results of operations.

Furthermore, in connection with the formation of RIT we guaranteed all of RIT's obligations to Biogen. If RIT were to default on its obligations to Biogen, Biogen could require us alone to satisfy all of those obligations under our guarantee.

The financial and other obligations that we would incur could have a material and adverse effect on our financial condition and results of operations.

If we are unable to expand the approved usage of Fusilev, the product's operating results may be harmed, which could adversely affect our financial and operating results.

We have filed a supplemental new drug application for Fusilev for use in combination with 5-FU-containing regimens in the treatment of colorectal cancer. The greatest potential use of this product is in this indication. If we are not able to obtain approval for this indication, we may not recognize the full anticipated value of our investment in the product and our financial and operating results could be adversely affected.

Our drug product Fusilev may not be more cost efficient than competing drugs and otherwise may not have any competitive advantage, which could hinder our ability to successfully commercialize it.

Fusilev is a novel folate analog formulation and the pharmacologically active isomer (the levo-isomer) of the racemic compound calcium leucovorin, a product already approved for the same indications our product is approved for. Leucovorin has been sold as a generic product on the market for a number of years. There are generic companies currently selling the product and therefore, Fusilev competes against a low-cost alternative. Also, Fusilev will be offered as part of a treatment regimen, and that regimen may change to exclude Fusilev. Accordingly, it may not gain acceptance by the medical field or become commercially successful.

The marketing and sale of Fusilev and Zevalin may be adversely affected by the marketing and sales efforts of third parties who sell these products outside the United States.

We have only licensed the rights to develop, market and sell Fusilev in North America, and have licensed the rights to develop, market and sell Zevalin in the United States. Other companies market and sell the same products in other parts of the world. If, as a result of their actions, negative publicity is associated with the product, our own efforts to successfully market and sell these products, may be adversely impacted.

The development of our drug product, apaziquone, may be adversely affected if the development efforts of Allergan, who retained certain rights to the product, are not successful.

In 2008, we entered into a co-development and license agreement with Allergan, Inc., or Allergan, for the worldwide development and commercialization of our drug product, apaziquone. Allergan has agreed to partially fund development and commercialization expenses for apaziquone. We do not fully control the drug development process under the license agreement. In addition, if we do not achieve certain milestones under the license agreement and it has been determined that failure to achieve these milestones was a result of our actions or inactions, Allergan is entitled to assume additional control over the development process. As a result, success of this product could depend, in part, upon the efforts of Allergan. Allergan may not be successful in the clinical development of the drug, obtaining approval of the product by regulatory authorities, or the eventual commercialization of apaziquone.

Table of Contents

The development of our drug product, ozarelix, may be adversely affected if the development efforts of Aeterna Zentaris, who retained certain rights to the product, are not successful.

Aeterna Zentaris licensed the rights to us to develop and market ozarelix in the United States, Canada, Mexico and India. Aeterna Zentaris, or its partners, may conduct their own clinical trials on ozarelix for regulatory approval in all other parts of the world. We will not have control over such development activities and our ability to attain regulatory approvals for ozarelix may be adversely impacted if its efforts are not successful.

The development of our drug product, satraplatin, depends on the efforts of a third party and, therefore, its eventual success or commercial viability is largely beyond our control.

In 2002, we entered into a co-development and license agreement with GPC Biotech AG, or GPC, for the worldwide development and commercialization of our drug product, satraplatin. GPC has agreed to fully fund development and commercialization expenses for satraplatin. We do not have control over the drug development process and therefore the success of this product depends upon the efforts of GPC and any of its sublicensees. GPC may not be successful in the clinical development of the drug, obtaining approval of the product by regulatory authorities, or the eventual commercialization of satraplatin.

The inability to retain and attract key personnel could significantly hinder our growth strategy and might cause our business to fail.

Our success depends upon the contributions of our key management and scientific personnel, especially Dr. Rajesh C. Shrotriya, our Chairman, President and Chief Executive Officer. Dr. Shrotriya has been President since 2000 and Chief Executive Officer since 2002, and has spearheaded our business strategy since that time. The loss of the services of Dr. Shrotriya or any other key personnel could delay or preclude us from achieving our business objectives.

We also require expertise in sales, marketing, pharmaceutical drug development and other areas in order to achieve our business objectives. Competition for qualified personnel among pharmaceutical companies is intense, and the loss of key personnel, or the delay or inability to attract and retain the additional skilled personnel required for the expansion of our business, could significantly damage our business.

As we evolve from a company primarily involved in development to a company also involved in commercialization, we may encounter difficulties in managing our growth and expanding our operations successfully.

We only recently began commercial sales of our products and have had to increase our personnel accordingly, including establishing a direct sales force. In addition, as we advance our drug products through clinical trials, we will need to expand our development, regulatory, manufacturing, marketing and sales capabilities or contract with third parties to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with such third parties, as well as additional collaborators and suppliers. Maintaining these relationships and managing our future growth will impose significant added responsibilities on members of our management. We must be able to: manage our development efforts effectively; manage our clinical trials effectively; hire, train and integrate additional management, development, administrative and sales and marketing personnel; improve our managerial, development, operational and finance systems and expand our facilities, all of which may impose a strain on our administrative and operational infrastructure.

If we acquire additional businesses, we may not successfully integrate their operations.

We may acquire additional businesses that complement or augment our existing business. Integrating any newly acquired business could be expensive and time-consuming. We may not be able to integrate any acquired business successfully or operate any acquired business profitably. Our future financial performance will depend, in part, on our ability to manage any future growth effectively and our ability to integrate any acquired businesses. We may not be able to accomplish these tasks, and our failure to accomplish any of them could prevent us from successfully growing our company.

Table of Contents

Our collaborations with outside scientists may be subject to change, which could limit our access to their expertise.

We work with scientific advisors and collaborators at research institutions. These scientists are not our employees and may have other commitments that would limit their availability to us. If a conflict of interest between their work for us and their work for another entity arises, we may lose their services, which could negatively impact our research and development activities.

We may rely on contract research organizations and other third parties to conduct clinical trials and, in such cases, we are unable to directly control the timing, conduct and expense of our clinical trials.

We may rely, in full or in part, on third parties to conduct our clinical trials. In such situations, we have less control over the conduct of our clinical trials, the timing and completion of the trials, the required reporting of adverse events and the management of data developed through the trial than would be the case if we were relying entirely upon our own staff. Communicating with outside parties can also be challenging, potentially leading to mistakes as well as difficulties in coordinating activities. Outside parties may have staffing difficulties, may undergo changes in priorities or may become financially distressed, adversely affecting their willingness or ability to conduct our trials. We may experience unexpected cost increases that are beyond our control. Problems with the timeliness or quality of the work of a contract research organization may lead us to seek to terminate the relationship and use an alternative service provider. However, making this change may be costly and may delay our trials, and contractual restrictions may make such a change difficult or impossible. Additionally, it may be impossible to find a replacement organization that can conduct our trials in an acceptable manner and at an acceptable cost.

We are subject to risks associated with doing business internationally.

Since we conduct clinical trials and manufacture our drug products internationally, our business is subject to certain risks inherent in international business, many of which are beyond our control. These risks include, among other things:

maintaining compliance with foreign legal requirements, including employment law;

unexpected changes in foreign regulatory requirements, including quality standards and other certification requirements;

tariffs, customs, duties and other trade barriers;

changing economic conditions in countries where our products are manufactured;

exchange rate risks;

product liability, intellectual property and other claims;

political instability;

new export license requirements; and

difficulties in coordinating and managing foreign operations.

Any of these factors could have an adverse effect on our business, financial condition and results of operations. We may not be able to successfully manage these risks or avoid their effects.

S-7

Table of Contents

We may have conflicts with our partners that could delay or prevent the development or commercialization of our drug products.

We may have conflicts with our partners, such as conflicts concerning the interpretation of preclinical or clinical data, the achievement of milestones, the interpretation of contractual obligations, payments for services, development obligations or the ownership of intellectual property developed during our collaboration. If any conflicts arise with any of our partners, such partner may act in a manner that is adverse to our best interests. Any such disagreement could result in one or more of the following, each of which could delay or prevent the development or commercialization of our drug product, and in turn prevent us from generating revenues:

unwillingness on the part of a partner to pay us milestone payments or royalties that we believe are due to us under a collaboration;

uncertainty regarding ownership of intellectual property rights arising from our collaborative activities, which could prevent us from entering into additional collaborations;

unwillingness by the partner to cooperate in the development or manufacture of the product, including providing us with product data or materials;

unwillingness on the part of a partner to keep us informed regarding the progress of its development and commercialization activities or to permit public disclosure of the results of those activities;

initiation of litigation or alternative dispute resolution options by either party to resolve the dispute;

attempts by either party to terminate the collaboration;

our ability to maintain or defend our intellectual property rights may be compromised by our partner's acts or omissions;

a partner may utilize our intellectual property rights in such a way as to invite litigation that could jeopardize or invalidate our intellectual property rights or expose us to potential liability;

a partner may change the focus of their development and commercialization efforts. As previously noted, pharmaceutical and biotechnology companies historically have re-evaluated their priorities following mergers and consolidations, which have been common in recent years in these industries. The ability of our products to reach their potential could be limited if future partners decrease or fail to increase spending relating to such products;

unwillingness of a partner to fully fund or commit sufficient resources to the testing, marketing, distribution or development of our products; and/or

unwillingness or ability of a partner to fulfill their obligations to us. A partner may develop alternative products either on their own or in collaboration with others, or encounter conflicts of interest or changes in business strategy or other business issues.

Given these risks, it is possible that any collaborative arrangements which we have or may enter into may not be successful.

Our efforts to acquire or in-license and develop additional drug products may fail, which might limit our ability to grow our business.

Our long-term strategy includes the acquisition or in-license of additional drug products. We are actively seeking to acquire, or in-license, additional commercial drug products as well as drug products that have demonstrated positive pre-clinical and/or clinical data. We have certain criteria that we are looking for in any drug product

acquisition and we may not be successful in locating and acquiring, or in-licensing, additional desirable drug products on acceptable terms. In addition, many other large and small companies within the pharmaceutical and biotechnology industry seek to establish collaborative arrangements for product research and development, or otherwise acquire products in late-stage clinical development, in competition with us. We face additional competition from public and private research organizations, academic institutions and governmental agencies in

S-8

Table of Contents

establishing collaborative arrangements for drug products in late-stage clinical development. Many of the companies and institutions that compete against us have substantially greater capital resources, research and development staffs and facilities than we have, and greater experience in conducting business development activities. These entities represent significant competition to us as we seek to expand our portfolio through the in-license or acquisition of compounds. Moreover, while it is not feasible to predict the actual cost of acquiring additional drug products, that cost could be substantial and we may need to raise additional financing, which may further dilute existing stockholders, in order to acquire new drug products.

From time to time we may need to license patents, intellectual property and proprietary technologies from third parties, which may be difficult or expensive to obtain.

We may need to obtain licenses to patents and other proprietary rights held by third parties to successfully develop, manufacture and market our drug products. As an example, it may be necessary to use a third party's proprietary technology to reformulate one of our drug products in order to improve upon the capabilities of the drug product. If we are unable to timely obtain these licenses on reasonable terms, our ability to commercially exploit our drug products may be inhibited or prevented.

We are a small company relative to our principal competitors, and our limited financial resources may limit our ability to develop and market our drug products.

Many companies, both public and private, including well-known pharmaceutical companies and smaller niche-focused companies, are developing products to treat many, if not all, of the diseases we are pursuing or are currently distributing drug products that directly compete with the drugs that we sell or that we intend to develop, market and distribute. Many of these companies have substantially greater financial, research and development, manufacturing, marketing and sales experience and resources than us. As a result, our competitors may be more successful than us in developing their products, obtaining regulatory approvals and marketing their products to consumers.

Competition for branded or proprietary drugs is less driven by price and is more focused on innovation in the treatment of disease, advanced drug delivery and specific clinical benefits over competitive drug therapies. We may not be successful in any or all of our current clinical studies; or if successful, and if one or more of our drug products is approved by the FDA, we may encounter direct competition from other companies who may be developing products for similar or the same indications as our drug products. Companies that have products on the market or in research and development that target the same indications as our products target include Neurocrine Biosciences, Abraxis Bioscience, Inc., Astra Zeneca LP, Amgen, Inc., Bayer AG, Bioniche Life Sciences Inc., Eli Lilly and Co., Novartis Pharmaceuticals Corporation, Genentech, Inc., Bristol-Myers Squibb Company, GlaxoSmithKline, Biogen-IDEC Pharmaceuticals, Inc., OSI Pharmaceuticals, Inc., Cephalon, Inc., Sanofi-aventis, Inc., Pfizer, Inc., AVI Biopharma, Inc., Genzyme Corporation, Shire Pharmaceuticals, Abbott Laboratories, Poniard Pharmaceuticals, Inc., Roche Pharmaceuticals, Johnson & Johnson and others who may be more advanced in the development of competing drug products or are more established. Many of our competitors are large and well-capitalized companies focusing on a wide range of diseases and drug indications, and have substantially greater financial, research and development, marketing, human and other resources than we do. Furthermore, large pharmaceutical companies have significantly more experience than we do in pre-clinical testing, human clinical trials and regulatory approval procedures, among other things.

Table of Contents

Our supply of drug products will be dependent upon the production capabilities of contract manufacturing organizations, or CMOs, and component and packaging supply sources, and, if such CMOs are not able to meet our demands, we may be limited in our ability to meet demand for our products, ensure regulatory compliance or maximize profit on the sale of our products.

We have no internal manufacturing capacity for our drug products, and, therefore, we have entered into agreements with CMOs to supply us with active pharmaceutical ingredients and our finished dose drug products. Consequently, we will be dependent on our CMO partners for our supply of drug products. Some of these manufacturing facilities are located outside the United States. The manufacture of finished drug products, including the acquisition of compounds used in the manufacture of the finished drug product, may require considerable lead times. We will have little or no control over the production process. Accordingly, while we do not currently anticipate shortages of supply, there could arise circumstances in which we will not have adequate supplies to timely meet our requirements or market demand for a particular drug product could outstrip the ability of our supply source to timely manufacture and deliver the product, thereby causing us to lose sales. In addition, our ability to make a profit on the sale of our drug products depends on our ability to obtain price arrangements that ensure a supply of product at favorable prices.

Reliance on CMOs entails risks to which we would not be subject if we manufactured products ourselves, including reliance on the third party for regulatory compliance and adherence to the FDA's current Good Manufacturing Practice, or cGMP, requirements, the possible breach of the manufacturing agreement by the CMO and the possibility of termination or non-renewal of the agreement by the CMO, based on its own business priorities, at a time that is costly or inconvenient for us. Before we can obtain marketing approval for our drug products, our CMO facilities must pass an FDA pre-approval inspection. In order to obtain approval, all of the facility's manufacturing methods, equipment and processes must comply with cGMP requirements. The cGMP requirements govern all areas of record keeping, production processes and controls, personnel and quality control. In addition, our CMOs will be subject to on-going periodic inspection by the FDA and corresponding state and foreign agencies for compliance with cGMP regulations, similar foreign regulations and other regulatory standards. We do not have control over our CMOs compliance with these regulations and standards. Any failure of our third party manufacturers or us to comply with applicable regulations, including an FDA pre-approval inspection and cGMP requirements, could result in sanctions being imposed on them or us, including warning letters, fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approval of our products, delay, suspension or withdrawal of approvals, license revocation, seizures or recalls of product, operation restrictions and criminal prosecutions, any of which could significantly and adversely affect our business.

We may not be successful in establishing additional active pharmaceutical ingredient or finished dose drug supply relationships, which would limit our ability to develop and market our drug products.

Success in the development and marketing of our drugs depends in part upon our ability to maintain, expand and enhance our existing relationships and establish new sources of supply for active pharmaceutical ingredients, or API, or for the manufacture of our finished dose drug products. We do not presently intend to focus our research and development efforts on developing APIs or manufacturing of finished dosage form for our drugs. In addition, we currently have no capacity to manufacture APIs or finished dose drug products and do not intend to spend our capital resources to develop the capacity to do so. Therefore, we must rely on relationships with API suppliers and other CMOs, to supply our APIs and finished dose drug products. We may not be successful in maintaining, expanding or enhancing our existing relationships or in securing new relationships with API suppliers or CMOs. If we fail to maintain or expand our existing relationships or secure new relationships, our ability to develop and market our drug products could be harmed.

We rely on contract suppliers to supply our existing products, and will likely do the same for other products that we may develop, commercialize or acquire in the future. Contract suppliers may not be able to meet our needs with respect to timing, cost, quantity or quality. All of our suppliers are sole-source suppliers, including for Zevalin and Fusilev, and no currently qualified alternative suppliers exist.

If we are unable to obtain a sufficient supply of our required products and services on acceptable terms, or if we should encounter delays or difficulties in our relationships with our manufacturers, or if any required approvals by the FDA and other regulatory authorities do not occur on a timely basis, we will lose sales. Moreover, contract suppliers

that we may use must continually adhere to current good manufacturing practices enforced by the FDA. If the facilities of these suppliers cannot pass an inspection, we may lose FDA approval of our products. Failure to obtain products for sale for any reason may result in an inability to meet product demand and a loss of potential revenues.

S-10

Table of Contents

Our drug products may not be more effective, safer or more cost-efficient than a competing drug and otherwise may not have any competitive advantage, which could hinder our ability to successfully commercialize our drug products.

Any drug product for which we obtain FDA approval must compete for market acceptance and market share. Drugs produced by other companies are currently on the market for each disease type we are pursuing. Even if one or more of our drug development products ultimately receives FDA approval, our drug products may not have better efficacy in treating the target indication than a competing drug, may not have a more favorable side-effect profile than a competing drug, may not be more cost-efficient to manufacture or apply, or otherwise may not demonstrate a competitive advantage over competing therapies. Accordingly, even if FDA approval is obtained for one or more of our drug development products, they may not gain acceptance by the medical field or become commercially successful.

The size of the market for our potential products is uncertain.

We often provide estimates of the number of people who suffer from the diseases that our drugs are targeting. However, there is limited information available regarding the actual size of these patient populations. In addition, it is uncertain whether the results from previous or future clinical trials of drug products will be observed in broader patient populations, and the number of patients who may benefit from our drug products may be significantly smaller than the estimated patient populations.

If actual product returns, chargebacks, discounts and rebates exceed the estimates we made at the time of the sale of our products, our financial position, results of operations and cash flows may be materially and negatively impacted.

We recognize product revenue net of estimated allowances for product returns, chargebacks, discounts and rebates. Such estimates require subjective and complex judgment based upon a number of factors that we review. We, like other pharmaceutical companies, permit customers to return products within 30 days after shipment, if incorrectly shipped or not ordered, and within a window of time 6 months before and 12 months after the expiration of product dating, subject to certain restocking fees and preauthorization requirements. The returned product is destroyed if it is damaged, quality is compromised or it is past its expiration date. Based on our returns policy, we refund the sales price to the customer as a credit against accounts receivable from the customer. In addition, like other pharmaceutical companies, we also allow credits to wholesale customers that have contracts with us, for chargebacks for their sales to hospitals, group purchasing organizations, pharmacies or other retail customers. A chargeback is the difference between the price the wholesale customer pays (Wholesale Acquisition Cost, or WAC) and the price that the wholesaler's end-customer pays for a product. We also accrue for prompt pay discounts presuming all eligible customers would claim such discounts. Rebates are estimated based on direct purchases, depending on whether any rebates have been offered. Medicaid rebates are based on the data we receive from the public sector benefit providers, which is based on the final dispensing of our product by a pharmacy to a benefit plan. We estimate the allowances based on a variety of information available to us to enable such estimates, including industry standard data of averages experienced by other pharmaceutical companies. Although we believe we have estimated the allowances appropriately, actual results may differ significantly from our estimated allowances for product returns, chargebacks, discounts and rebates. Changes in estimates are made to the financial statements in the period in which the estimate is changed. Our financial position, results of operations and cash flows may be materially and negatively impacted if actual future payments for product returns, chargebacks, discounts and rebates exceed the estimates we made at the time of the sale of our products.

Table of Contents

Risks Related to Our Industry

If third-party payors do not adequately reimburse providers for any of our products, if approved for marketing, we may not be successful in selling them.

Our ability to commercialize any products successfully will depend in part on the extent to which reimbursement will be available from governmental and other third-party payors, both in the United States and in foreign markets. Even if we succeed in bringing one or more products to the market, the amount reimbursed for our products may be insufficient to allow us to compete effectively and could adversely affect our profitability.

S-12

Table of Contents

Reimbursement by a governmental and other third-party payors may depend upon a number of factors, including a governmental or other third-party payor's determination that use of a product is:

a covered benefit under its health plan;

safe, effective and medically necessary;

appropriate for the specific patient;

cost-effective; and

neither experimental nor investigational.

Obtaining reimbursement approval for a product from each third-party and governmental payor is a time-consuming and costly process that could require us to provide supporting scientific, clinical and cost-effectiveness data for the use of our products to each payor. We may not be able to provide data sufficient to obtain reimbursement.

Eligibility for coverage does not imply that any drug product will be reimbursed in all cases or at a rate that allows us to make a profit. Interim payments for new products, if applicable, may also not be sufficient to cover our costs and may not become permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on payments allowed for lower-cost drugs that are already reimbursed, may be incorporated into existing payments for other products or services, and may reflect budgetary constraints and/or Medicare or Medicaid data used to calculate these rates. Net prices for products also may be reduced by mandatory discounts or rebates required by government health care programs or by any future relaxation of laws that restrict imports of certain medical products from countries where they may be sold at lower prices than in the United States.

The consolidation of drug wholesalers and other wholesaler actions could increase competitive and pricing pressures on pharmaceutical manufacturers, including us.

We sell our pharmaceutical products primarily through wholesalers. These wholesale customers comprise a significant part of the distribution network for pharmaceutical products in the United States. This distribution network is continuing to undergo significant consolidation. As a result, a smaller number of large wholesale distributors control a significant share of the market. We expect that consolidation of drug wholesalers will increase competitive and pricing pressures on pharmaceutical manufacturers, including us. In addition, wholesalers may apply pricing pressure through fee-for-service arrangements, and their purchases may exceed customer demand, resulting in reduced wholesaler purchases in later quarters. We cannot assure you that we can manage these pressures or that wholesaler purchases will not decrease as a result of this potential excess buying.

Rapid bio-technological advancement may render our drug products obsolete before we are able to recover expenses incurred in connection with their development. As a result, our drug products may never become profitable.

The pharmaceutical industry is characterized by rapidly evolving biotechnology. Biotechnologies under development by other pharmaceutical companies could result in treatments for diseases and disorders for which we are developing our own treatments. Several other companies are engaged in research and development of compounds that are similar to our research. A competitor could develop a new biotechnology, product or therapy that has better efficacy, a more favorable side-effect profile or is more cost-effective than one or more of our drug products and thereby cause our drug products to become commercially obsolete. Some of our drug products may become obsolete before we recover the expenses incurred in their development. As a result, such products may never become profitable.

Table of Contents

Competition for patients in conducting clinical trials may prevent or delay product development and strain our limited financial resources.

Many pharmaceutical companies are conducting clinical trials in patients with the disease indications that our drug products target. As a result, we must compete with them for clinical sites, physicians and the limited number of patients who fulfill the stringent requirements for participation in clinical trials. Also, due to the confidential nature of clinical trials, we do not know how many of the eligible patients may be enrolled in competing studies and who are consequently not available to us for our clinical trials. Our clinical trials may be delayed or terminated due to the inability to enroll enough patients to complete our clinical trials. Patient enrollment depends on many factors, including the size of the patient population, the nature of the trial protocol, the proximity of patients to clinical sites and the eligibility criteria for the study. The delay or inability to meet planned patient enrollment may result in increased costs and delays or termination of the trial, which could have a harmful effect on our ability to develop products.

Failure to obtain regulatory approval outside the United States will prevent us from marketing our product candidates abroad.

We have plans to market certain of our existing and future product candidates in non-U.S. markets in the future. In order to market our existing and future product candidates in the European Union and many other non-U.S. jurisdictions, we must obtain separate regulatory approvals. We have had limited interactions with non-U.S. regulatory authorities, and the approval procedures vary among countries and can involve additional testing, and the time required to obtain approval may differ from that required to obtain FDA approval. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one or more non-U.S. regulatory authorities does not ensure approval by regulatory authorities in other countries or by the FDA. The non-U.S. regulatory approval process may include all of the risks associated with obtaining FDA approval as well as other risks specific to the jurisdictions in which we may seek approval. We may not obtain non-U.S. regulatory approvals on a timely basis, if at all. We may not be able to file for non-U.S. regulatory approvals and may not receive necessary approvals to commercialize our existing and future product candidates in any market.

Even after we receive regulatory approval to market our drug products, the market may not be receptive to our drug products upon their commercial introduction, which would negatively affect our ability to achieve profitability.

Our drug products may not gain market acceptance among physicians, patients, healthcare payors and the medical community. The degree of market acceptance of any approved drug products will depend on a number of factors, including:

the effectiveness of the drug product;

the prevalence and severity of any side effects;

potential advantages or disadvantages over alternative treatments;

relative convenience and ease of administration;

the strength of marketing and distribution support;

the price of the drug product, both in absolute terms and relative to alternative treatments; and

sufficient third-party coverage or reimbursement.

If our drug products receive regulatory approval but do not achieve an adequate level of acceptance by physicians, healthcare payors and patients, we may not generate drug product revenues sufficient to attain profitability.

Table of Contents

Guidelines and recommendations published by various organizations can reduce the use of our products.

Government agencies promulgate regulations and guidelines directly applicable to us and to our products. However, professional societies, practice management groups, insurance carriers, physicians, private health/science foundations and organizations involved in various diseases from time to time may also publish guidelines or recommendations to healthcare providers, administrators and payers, and patient communities. Recommendations of government agencies or these other groups/organizations may relate to such matters as usage, dosage, route of administration and use of related therapies and reimbursement of our products by government and private payers. Organizations like these have in the past made recommendations about our products. Recommendations or guidelines that are followed by patients and healthcare providers could result in decreased use and/or dosage of our products.

Any recommendations or guidelines that result in decreased use, dosage or reimbursement of our products could adversely affect our product sales and operating results materially. In addition, the perception by the investment community or stockholders that such recommendations or guidelines will result in decreased use and dosage of our products could adversely affect the market price for our common stock.

Our failure to comply with governmental regulations may delay or prevent approval of our drug products and/or subject us to penalties.

The FDA and comparable agencies in foreign countries impose many requirements on the introduction of new drugs through lengthy and detailed clinical testing and data collection procedures, and other costly and time consuming compliance procedures. While we believe that we are currently in compliance with applicable FDA regulations, if our partners, our contract research organizations, our CMOs or we fail to comply with the regulations applicable to our clinical testing, the FDA may delay, suspend or cancel our clinical trials, or the FDA might not accept the test results. The FDA, an institutional review board at our clinical trial sites, our third party investigators, any comparable regulatory agency in another country, or we, may suspend clinical trials at any time if the trials expose subjects participating in such trials to unacceptable health risks. Further, human clinical testing may not show any current or future drug product to be safe and effective to the satisfaction of the FDA or comparable regulatory agencies, or the data derived from the clinical tests may be unsuitable for submission to the FDA or other regulatory agencies.

Once we submit a drug product for commercial sale approval, the FDA or other regulatory agencies may not issue their approvals on a timely basis, if at all. If we are delayed or fail to obtain these approvals, our business and prospects may be significantly damaged. Even if we obtain regulatory approval for our drug products, we, our partners, our manufacturers, and other contract entities will continue to be subject to extensive requirements by a number of national, foreign, state and local agencies. These regulations will impact many aspects of our operations, including testing, research and development, manufacturing, safety, effectiveness, labeling, storage, quality control, adverse event reporting, record keeping, approval, advertising and promotion of our future products. Failure to comply with applicable regulatory requirements could, among other things, result in:

warning letters;

finest;

changes in advertising;

revocation or suspension of regulatory approvals of products;

product recalls or seizures;

delays, interruption, or suspension of product distribution, marketing and sale;

civil or criminal sanctions; and

refusals to approve new products.

Table of Contents

The discovery of previously unknown problems with drug products approved to go to market may raise costs or prevent us from marketing such product or change the labeling of our products or take other potentially limiting or costly actions if we or others identify side effects after our products are on the market.

The later discovery of previously unknown problems with our products may result in restrictions of the drug product, including withdrawal from the market. In addition, the FDA may revisit and change its prior determinations with regard to the safety and efficacy of our products. If the FDA's position changes, we may be required to change our labeling or to cease manufacture and marketing of the challenged products. Even prior to any formal regulatory action, we could voluntarily decide to cease the distribution and sale or recall any of our products if concerns about their safety or effectiveness develop.

On September 27, 2007, President George W. Bush signed into law the Food and Drug Administration Amendments Act of 2007, or the FDAAA, significantly adding to the FDA's authority, including allowing the FDA to (i) require sponsors of marketed products to conduct post-approval clinical studies to assess a known serious risk, signals of serious risk or to identify an unexpected serious risk; (ii) mandate labeling changes to products, at any point in a product's lifecycle, based on new safety information and (iii) require sponsors to implement a Risk Evaluation and Mitigation Strategy (REMS) for a product which could include a medication guide, patient package insert, a communication plan to healthcare providers, or other elements as the FDA deems are necessary to assure safe use of the drug (either prior to approval or post-approval as necessary), which could include imposing certain restrictions on distribution or use of a product. Failure to comply with the new requirements, if imposed on a sponsor by the FDA under the FDAAA, could result in significant civil monetary penalties or other administrative actions by FDA. Further, regulatory agencies could change existing, or promulgate new, regulations at any time which may affect our ability to obtain or maintain approval of our existing or future products or require significant additional costs to obtain or maintain such approvals.

Our failure to comply with FDA (and related) regulations applicable to our business may subject us to sanctions, which could damage our reputation and adversely affect our business condition.

In the U.S., the FDA, and comparable state regulatory agencies and enforcement authorities, impose requirements on us as a manufacturer and marketer of prescription drug products. Drug manufacturers are required to register with the FDA, and are required to comply with various regulatory requirements regarding drug research, manufacturing, distribution, reporting and recordkeeping. Most drug products must be approved by the FDA prior to marketing, and companies are required to comply with numerous post-marketing requirements. Companies are also subject to periodic inspection by the FDA for compliance with cGMP and other applicable regulations.

Further, drug manufacturers are required to comply with FDA requirements for labeling and advertising, as well as other Federal and state requirements for advertising. This includes a prohibition on promotion for unapproved or off-label uses, e.g., promotion of products for uses that are not described in the product's FDA-approved labeling. While a physician may prescribe a medication for off-label uses where appropriate, companies may not generally promote drug products for off-label uses.

If the FDA or other Federal and state agencies believe that a company is not in compliance with applicable regulations, they have various enforcement authorities to address violations. The FDA can issue a warning letter and seek voluntary compliance from a company in the form of remedial or corrective action. The FDA may also impose civil money penalties by administrative action, and through judicial enforcement seek actions including injunctions, seizures, and criminal penalties. The FDA or other Federal and state authorities may also seek operating restrictions on a company in order to achieve compliance, including termination or suspension of company activities. Such agencies and enforcement authorities may also disseminate information to the public about their enforcement actions.

If we were to become subject to any FDA or similar enforcement action related to any of our drug products, our business condition could be adversely affected, and the public release of such information could be damaging to our reputation.

Table of Contents***Legislative or regulatory reform of the healthcare system and pharmaceutical industry related to pricing or reimbursement may hurt our ability to sell our products profitably or at all.***

In both the United States and certain foreign jurisdictions, there have been and may continue to be a number of legislative and regulatory proposals to change the healthcare system and pharmaceutical industry in ways that could impact our ability to sell our products profitably. Sales of our products depend in part on the availability of reimbursement from third-party payors such as government health administration authorities, private health insurers, health maintenance organizations including pharmacy benefit managers and other health care-related organizations. Both the Federal and state governments in the U.S. and foreign governments continue to propose and pass new legislation and regulations designed to contain or reduce the cost of health care. Such legislation and regulations may result in decreased reimbursement for prescription drugs, which may further exacerbate industry-wide pressure to reduce the prices charged for prescription drugs. This could harm our ability to market our products and generate revenues.

It is possible that proposals will be adopted, or existing regulations that affect the coverage or pricing of pharmaceutical and other medical products may change, before any of our products are approved for marketing. Cost control initiatives could decrease the price that we receive for any of our products that we are developing. In addition, third-party payors are increasingly challenging the price and cost-effectiveness of medical products and services. Significant uncertainty exists as to the reimbursement status of newly-approved pharmaceutical products.

In some foreign countries, particularly in the European Union, prescription drug pricing is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our profitability will be negatively affected.

If we market products in a manner that violates health care anti-kickback or other fraud and abuse laws, we may be subject to civil or criminal penalties, including exclusions from participation in Federal health care programs.

The Federal health care program anti-kickback statute prohibits, among other things, knowingly and willfully offering, paying, soliciting, or receiving remuneration to induce or in return for purchasing, leasing, ordering, or arranging for the purchase, lease or order of any health care item or service reimbursable under Medicare, Medicaid or other federally financed health care programs. This statute applies to arrangements between pharmaceutical manufacturers and prescribers, purchasers and formulary managers. Although there are a number of statutory exemptions and regulatory safe harbors protecting certain common activities, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exemption or safe harbor.

Federal false claims laws prohibit any person from knowingly presenting, or causing to be presented, a false claim for payment to the Federal government, or knowingly making, or causing to be made, a false statement to get a false claim paid. Pharmaceutical companies have been prosecuted under these laws for a variety of alleged promotional and marketing activities, such as providing free product to customers with the expectation that the customers would bill Federal programs for the product; reporting to pricing services inflated average wholesale prices that were then used by Federal programs to set reimbursement rates; engaging in off-label promotion that caused claims to be submitted to Medicaid for non-covered off-label uses; and submitting inflated best price information to the Medicaid Rebate Program.

The Health Insurance Portability and Accountability Act of 1996 also created prohibitions against health care fraud and false statements relating to health care matters. The health care fraud statute prohibits knowingly and willfully executing a scheme to defraud any health care benefit program, including private payors. The false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for health care benefits, items or services.

Table of Contents

The majority of states also have statutes or regulations similar to these Federal laws, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. In addition, some states have laws that require pharmaceutical companies to adopt comprehensive compliance programs. For example, under California law, pharmaceutical companies must comply with both the April 2003 Office of Inspector General Compliance Program Guidance for Pharmaceutical Manufacturers and the PhRMA Code on Interactions with Healthcare Professionals, as amended. We have adopted and implemented a compliance program which we believe satisfies the applicable requirements of California law.

Sanctions under these Federal and state laws may include civil monetary penalties, exclusion of a manufacturer's products from reimbursement under government programs, criminal fines and imprisonment. Because of the breadth of these laws and the narrowness of the safe harbors, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If our past, present or future operations are found to be in violation of any of the laws described above or other similar governmental regulations to which we are subject, we may be subject to the applicable penalty associated with the violation which could adversely affect our ability to operate our business and our financial results.

If we are unable to adequately protect our technology or enforce our patent rights, our business could suffer.

Our success with the drug products that we develop will depend, in part, on our ability and the ability of our licensors to obtain and maintain patent protection for these products. We currently have a number of United States and foreign patents issued and pending, however, we primarily rely on patent rights licensed from others. Our license agreements generally give us the right and/or obligation to maintain and enforce the subject patents. We may not receive patents for any of our pending patent applications or any patent applications we may file in the future. If our pending and future patent applications are not allowed or, if allowed and issued into patents, if such patents and the patents we have licensed are not upheld in a court of law, our ability to competitively exploit our drug products would be substantially harmed. Also, such patents may or may not provide competitive advantages for their respective products or they may be challenged or circumvented by our competitors, in which case our ability to commercially exploit these products may be diminished.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions. No consistent policy regarding the breadth of claims allowed in pharmaceutical and biotechnology patents has emerged to date in the United States. The laws of many countries may not protect intellectual property rights to the same extent as United States laws, and those countries may lack adequate rules and procedures for defending our intellectual property rights. Filing, prosecuting and defending patents on all our products or product candidates throughout the world would be prohibitively expensive. Competitors may use our technologies in jurisdictions and may not be covered by any of our patent claims or other intellectual property rights.

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. We do not know whether any of our patent applications will result in the issuance of any patents, and we cannot predict the breadth of claims that may be allowed in our patent applications or in the patent applications we license from others.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

we or our licensors might not have been the first to make the inventions covered by each of our or our licensors pending patent applications and issued patents, and we may have to participate in expensive and protracted interference proceedings to determine priority of invention;

we or our licensors might not have been the first to file patent applications for these inventions;

others may independently develop similar or alternative product candidates or duplicate any of our or our licensors' product candidates;

our or our licensors' pending patent applications may not result in issued patents;

our or our licensors issued patents may not provide a basis for commercially viable products or may not provide us with any competitive advantages or may be challenged by third parties;

S-18

Table of Contents

others may design around our or our licensors' patent claims to produce competitive products that fall outside the scope of our or our licensors' patents;

we may not develop or in-license additional patentable proprietary technologies related to our product candidates; or

the patents of others may prevent us from marketing one or more of our product candidates for one or more indications that may be valuable to our business strategy.

Moreover, an issued patent does not guarantee us the right to practice the patented technology or commercialize the patented product. Third parties may have blocking patents that could be used to prevent us from commercializing our patented products and practicing our patented technology. Our issued patents and those that may be issued in the future may be challenged, invalidated or circumvented, which could limit our ability to prevent competitors from marketing related product candidates or could limit the length of the term of patent protection of our product candidates. In addition, our competitors may independently develop similar technologies. Moreover, because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that, before any of our product candidates can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of the patent.

We also rely on trade secret protection and contractual protections for our unpatented, confidential and proprietary technology. Trade secrets are difficult to protect. While we enter into confidentiality agreements with our employees, consultants and others, these agreements may not successfully protect our trade secrets or other confidential and proprietary information. It is possible that these agreements will be breached, or that they will not be enforceable in every instance, and that we will not have adequate remedies for any such breach. Likewise, although we conduct periodic trade secret audits of certain partners, vendors and contract manufacturers, these trade secret audits may not protect our trade secrets or other confidential and proprietary information. It is possible that despite having certain trade secret audited security measures in place, trade secrets or other confidential and proprietary information may still be leaked or disclosed to a third party. It is also possible that our trade secrets will become known or independently developed by our competitors.

If we are unable to adequately protect our technology, trade secrets or proprietary know-how, or enforce our patents, our business, financial condition and prospects could suffer.

Intellectual property rights are complex and uncertain and therefore may subject us to infringement claims.

The patent positions related to our drug products are inherently uncertain and involve complex legal and factual issues. Although we are not aware of any infringement by any of our drug products on the rights of any third party, there may be third party patents or other intellectual property rights relevant to our drug products of which we are not aware. Third parties may assert patent or other intellectual property infringement claims against us with products. This could draw us into costly litigation as well as result in the loss of our use of the intellectual property that is critical to our business strategy.

Intellectual property litigation is increasingly common and increasingly expensive and may result in restrictions on our business and substantial costs, even if we prevail.

Patent and other intellectual property litigation is becoming more common in the pharmaceutical industry. Litigation is sometimes necessary to defend against or assert claims of infringement, to enforce our patent rights, including those we have licensed from others, to protect trade secrets or to determine the scope and validity of proprietary rights of third parties. Currently, no third party is asserting that we are infringing upon their patent rights or other intellectual property, nor are we aware or believe that we are infringing upon any third party's patent rights or other intellectual property. We may, however, be infringing upon a third party's patent rights or other intellectual property, and litigation asserting such claims might be initiated in which we would not prevail, or we would not be able to obtain the necessary licenses on reasonable terms, if at all. All such litigation, whether meritorious or not, as well as litigation initiated by us against third parties, is time-consuming and very expensive to defend or prosecute and to resolve. In addition, if we infringe the intellectual property rights of others, we could lose our right to develop, manufacture or sell our products or could be required to pay monetary damages or royalties to license proprietary rights from third parties. An adverse determination in a judicial or administrative proceeding or a failure to obtain

necessary licenses could prevent us from manufacturing or selling our products, which could harm our business, financial condition and prospects.

S-19

Table of Contents

If our competitors prepare and file patent applications in the United States or Europe that claim technology we also claim, we may have to participate in interference proceedings required by the United States Patent and Trademark Office to determine priority of invention or opposition proceedings in Europe, both of which could result in substantial costs, even if we ultimately prevail. Results of interference and opposition proceedings are highly unpredictable and may result in us having to try to obtain licenses in order to continue to develop or market certain of our drug products.

We may be subject to damages resulting from claims that we, or our employees, have wrongfully used or disclosed alleged trade secrets of our employees former employers.

Many of our employees were previously employed at universities or biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we have not received any claim to date, we may be subject to claims that these employees through their employment inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel.

We may be subject to product liability claims, and may not have sufficient product liability insurance to cover any such claims, which may expose us to substantial liabilities.

We may be held liable if any product we or our partners develop causes injury or is found otherwise unsuitable during product testing, manufacturing, marketing or sale. Regardless of merit or eventual outcome, product liability claims could result in decreased demand for our product candidates, injury to our reputation, withdrawal of patients from our clinical trials, substantial monetary awards to trial participants and the inability to commercialize any products that we may develop. These claims might be made directly by consumers, health care providers, pharmaceutical companies or others selling or testing our products. Although we currently carry product liability insurance in the amount of at least \$10 million in the aggregate, it is possible that this coverage will be insufficient to protect us from future claims. However, our insurance may not reimburse us or may not be sufficient to reimburse us for expenses or losses we may suffer. Moreover, if insurance coverage becomes more expensive, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. Failure to maintain sufficient insurance coverage could have a material adverse effect on our business, prospects and results of operations if claims are made that exceed our coverage.

On occasion, juries have awarded large judgments in class action lawsuits for claims based on drugs that had unanticipated side effects. In addition, the pharmaceutical and biotechnology industries, in general, have been subject to significant medical malpractice litigation. A successful product liability claim or series of claims brought against us could harm our reputation and business and would decrease our cash reserves.

The use of hazardous materials in our research and development efforts imposes certain compliance costs on us and may subject us to liability for claims arising from the use or misuse of these materials.

Our research and development efforts have involved and currently involve the use of hazardous materials. We are subject to federal, state and local laws and regulations governing the storage, use and disposal of these materials and some waste products. We believe that our safety procedures for the storage, use and disposal of these materials comply with the standards prescribed by federal, state and local regulations. However, we cannot completely eliminate the risk of accidental contamination or injury from these materials. If there were to be an accident, we could be held liable for any damages that result, which could exceed our financial resources. We currently maintain insurance coverage for injuries resulting from the hazardous materials we use; however, future claims may exceed the amount of our coverage. Also, we do not have insurance coverage for pollution clean up and removal. Currently the costs of complying with federal, state and local regulations are not significant, and consist primarily of waste disposal expenses.

Table of Contents

Risks Related to this Offering and Our Common Stock

There are a substantial number of shares of our common stock eligible for future sale in the public market. The sale of these shares could cause the market price of our common stock to fall. Any future equity issuances by us may have dilutive and other effects on our existing stockholders.

As of September 17, 2009, there were approximately 42.1 million shares of our common stock outstanding, and in addition, security holders held options, warrants and preferred stock which, if vested, exercised or converted, would obligate us to issue up to approximately 16.5 million additional shares of common stock. However, we would receive approximately \$80.0 million from the issuance of shares of common stock upon the exercise of all of the options and warrants. A substantial number of those shares, when we issue them upon vesting, conversion or exercise, will be available for immediate resale in the public market. In addition, we have a shelf registration statement to sell up to approximately \$2.5 million of our securities, some or all of which may be shares of our common stock or securities convertible into or exercisable for shares of our common stock, and all of which would be available for resale in the market. The market price of our common stock could fall as a result of sales of any of these shares of common stock due to the increased number of shares available for sale in the market.

We have primarily financed our operations, and we anticipate that we will have to finance a large portion of our operating cash requirements, by issuing and selling our common stock or securities convertible into or exercisable for shares of our common stock. Any issuances by us of equity securities may be at or below the prevailing market price of our common stock and may have a dilutive impact on our existing stockholders. These issuances or other dilutive issuances would also cause our net income, if any, per share to decrease in future periods. As a result, the market price of our common stock could drop.

The market price and trading volume of our common stock fluctuate significantly and could result in substantial losses for individual investors.

The stock market from time to time experiences significant price and trading volume fluctuations that are unrelated to the operating performance of particular companies. These broad market fluctuations may cause the market price and trading volume of our common stock to decrease. In addition, the market price and trading volume of our common stock is often highly volatile.

Factors that may cause the market price and volume of our common stock to decrease include:

adverse results or delays in our clinical trials;

fluctuations in our results of operations;

timing and announcements of our bio-technological innovations or new products or those of our competitors;

developments concerning any strategic alliances or acquisitions we may enter into;

announcements of FDA non-approval of our drug products, or delays in the FDA or other foreign regulatory review process or actions;

adverse actions taken by regulatory agencies with respect to our drug products, clinical trials, manufacturing processes or sales and marketing activities;

concerns about our products being reimbursed;

any lawsuit involving us or our drug products;

developments with respect to our patents and proprietary rights;

announcements of technological innovations or new products by our competitors;

public concern as to the safety of products developed by us or others;

S-21

Table of Contents

regulatory developments in the United States and in foreign countries;

changes in stock market analyst recommendations regarding our common stock or lack of analyst coverage;

the pharmaceutical industry generally and general market conditions;

failure of our results of operations to meet the expectations of stock market analysts and investors;

sales of our common stock by our executive officers, directors and five percent stockholders or sales of substantial amounts of our common stock;

changes in accounting principles; and

loss of any of our key scientific or management personnel.

Also, certain dilutive securities such as warrants can be used as hedging tools which may increase volatility in our stock and cause a price decline. While a decrease in market price could result in direct economic loss for an individual investor, low trading volume could limit an individual investor's ability to sell our common stock, which could result in substantial economic loss as well. Since January 1, 2008 through September 17, 2009, the price of our common stock ranged between \$0.46 and \$10.00, and the daily trading volume was as high as 15,456,000 shares and as low as 20,200 shares. In addition, due in large part to the current global economic crisis many institutional investors that historically had invested in specialty pharmaceutical companies have ceased operations or further investment in these companies, which has had negatively impacted trading volume for our stock.

Following periods of volatility in the market price of a company's securities, securities class action litigation may be instituted against that company. Regardless of their merit, these types of lawsuits generally result in substantial legal fees and management's attention and resources being diverted from the operations of a business.

Provisions of our charter, bylaws and stockholder rights plan may make it more difficult for someone to acquire control of us or replace current management even if doing so would benefit our stockholders, which may lower the price an acquirer or investor would pay for our stock.

Provisions of our certificate of incorporation and bylaws, both as amended, may make it more difficult for someone to acquire control of us or replace our current management. These provisions include:

the ability of our board of directors to amend our bylaws without stockholder approval;

the inability of stockholders to call special meetings;

the ability of members of the board of directors to fill vacancies on the board of directors;

the inability of stockholders to act by written consent, unless such consent is unanimous; and

the establishment of advance notice requirements for nomination for election to our board of directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

These provisions may make it more difficult for stockholders to take certain corporate actions and could delay, discourage or prevent someone from acquiring our business or replacing our current management, even if doing so would benefit our stockholders. These provisions could limit the price that certain investors might be willing to pay for shares of our common stock.

We have a stockholder rights plan pursuant to which we distributed rights to purchase units of our Series B junior participating preferred stock. The rights become exercisable upon the earlier of ten days after a person or group of affiliated or associated persons has acquired 15% or more of the outstanding shares of our common stock or ten business days after a tender offer has commenced that would result in a person or group beneficially owning

Table of Contents

15% or more of our outstanding common stock. These rights could delay or discourage someone from acquiring our business, even if doing so would benefit our stockholders. We currently have no stockholders who own 15% or more of the outstanding shares of our common stock.

Our publicly-filed SEC reports are reviewed by the SEC from time to time and any significant changes required as a result of any such review may result in material liability to us and have a material adverse impact on the trading price of our common stock.

The reports of publicly-traded companies are subject to review by the SEC from time to time for the purpose of assisting companies in complying with applicable disclosure requirements and to enhance the overall effectiveness of companies' public filings, and reviews of such reports are now required at least every three years under the Sarbanes-Oxley Act of 2002. SEC reviews may be initiated at any time. While we believe that our previously filed SEC reports comply, and we intend that all future reports will comply, in all material respects with the published rules and regulations of the SEC, we could be required to modify or reformulate information contained in prior filings as a result of an SEC review. Any modification or reformulation of information contained in such reports could be significant and could result in material liability to us and have a material adverse impact on the trading price of our common stock.

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

We have not allocated specific amounts of the net proceeds from this offering for any specific purpose. Accordingly, our management will have significant flexibility in applying the net proceeds of this offering. Accordingly, you will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. It is possible that the net proceeds will be invested in a way that does not yield a favorable, or any, return for our company. The failure of our management to use such funds effectively could have a material adverse effect on our business, financial condition, operating results and cash flow.

Investors in this offering may pay a higher price than the book value of our stock.

If you purchase securities in this offering, you will incur an immediate and substantial dilution in net tangible book value, after giving effect to the sale by us of 6,622,517 shares of common stock offered in this offering at the price to the public of \$7.55 per share.

Due to the current condition of the financial markets, our financial assets could be compromised, and we may be unable to raise additional capital in a timely manner.

We believe the financial institutions through which we have invested our funds are strong, well capitalized and our instruments are held in accounts segregated from the assets of the institutions. However, due to the current extremely volatile financial and credit markets and liquidity crunch faced by most banking institutions, the financial viability of these institutions, and the safety and liquidity of our funds is being constantly monitored. Should these financial institutions fail to provide us with required liquidity at the time of need, we may be adversely affected and may not be able to carry out our business plans as anticipated.

In addition, in light of the current volatile and tight financial and credit markets, we may not be able to raise additional capital on favorable terms, if at all. Accordingly, we may be forced to significantly change our business plans and restructure our operations to conserve cash, which would likely involve out-licensing or selling some or all of our intellectual, technological and tangible property not presently contemplated and at terms that we believe would not be favorable to us, and/or reducing the scope and nature of our currently planned drug development activities. An inability to raise additional capital could also impact our ability to expand operations.

We do not anticipate declaring any cash dividends on our common stock.

We have never declared or paid cash dividends on our common stock and do not plan to pay any cash dividends on our common stock in the foreseeable future. Our current policy is to retain all funds and any earnings for use in the operation and expansion of our business.

Table of Contents

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Forward-looking statements are those that predict or describe future events or trends that do not relate solely to historical matters. Words such as anticipates, expects, intends, plans, believes, seeks, estimates, and various words and similar expressions are intended to identify such forward-looking statements, although not all forward-looking statements contain these identifying words. These statements are based on current expectations, estimates and projections about our industry, management's beliefs, and assumptions made by management. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict. Therefore, actual results may differ materially from those expressed or forecasted in any forward-looking statements.

We urge you to consider these factors carefully in evaluating the forward-looking statements contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein. All subsequent written or oral forward-looking statements attributable to our company or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. The forward-looking statements included in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein are made only as of the date of the document containing the applicable statement. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent that we are required to do so by law.

You should not place undue reliance on our forward-looking statements because the matters they describe are subject to known and unknown risks, uncertainties and other unpredictable factors, many of which are beyond our control. Our forward-looking statements are based on the information currently available to us and speak only as of the date of the document that includes the statement. New risks and uncertainties arise from time to time, and it is impossible for us to predict these matters or how they may affect us. Over time, our actual results, performance or achievements will likely differ from the anticipated results, performance or achievements that are expressed or implied by our forward-looking statements, and such difference might be significant and materially adverse to our security holders.

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

USE OF PROCEEDS

We expect the net proceeds from this offering to be up to approximately \$47.5 million after deducting the placement agent fees, as described in Plan of Distribution, and other estimated offering expenses payable by us, which include legal, filing costs and various other fees associated with registering the securities and listing the common stock, and excluding the proceeds, if any, from the exercise of the warrants issued in this offering. We intend to use the net proceeds from the sale of the securities under this prospectus supplement for general corporate purposes, including, without limitation, sales and marketing activities, clinical development, making acquisitions of assets, companies or securities, capital expenditures and for working capital.

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses of the proceeds from this offering. Accordingly, we will retain broad discretion over the use of such proceeds. Pending the use of the net proceeds from this offering as described above, we may invest the proceeds in investment-grade, interest-bearing instruments or other similar securities.

Table of Contents**DILUTION**

Our net tangible book value on June 30, 2009 was approximately \$46.6 million, or approximately \$1.1163 per share of common stock. Net tangible book value per share is determined by dividing our net tangible book value, which consists of tangible assets less total liabilities, by the number of shares of common stock outstanding on that date. Without taking into account any other changes in our net tangible book value after June 30, 2009, other than to give effect to our receipt of the estimated net proceeds from the sale of 6,622,517 units at an offering price of \$7.55 per unit, less the placement agent fees and our estimated offering expenses, our net tangible book value as of June 30, 2009, after giving effect to the items above, would have been approximately \$94.0 million, or \$1.9457 per share. This represents an immediate increase in net tangible book value of \$0.8294 per share of common stock to our existing stockholders and an immediate dilution in net tangible book value of \$5.6043 per share of common stock to purchasers of units in this offering. The following table illustrates this per share dilution:

| | | |
|---|-----------|-----------|
| Public offering price per unit | | \$ 7.55 |
| Net tangible book value per share as of June 30, 2009 | \$ 1.1163 | |
| Increase in net tangible book value per share attributable to this offering | \$ 0.8294 | |
| Pro forma net tangible book value per share as of June 30, 2009, after giving effect to this offering | | \$ 1.9457 |
| Dilution in net tangible book value per share to new investors in this offering | | \$ 5.6043 |

The above table is based on 41,707,484 shares of our common stock outstanding as of June 30, 2009 (as adjusted for 6,622,517 shares of common stock to be issued in this offering) and excludes, as of June 30, 2009:

136,000 shares of common stock issuable upon the conversion of our outstanding Series E convertible preferred stock;

Approximately 8,500,000 shares of common stock issuable upon the exercise of warrants outstanding prior to this offering;

2,649,007 shares of common stock issuable upon the exercise of warrants to be issued to purchasers in this offering;

Approximately 8,000,000 shares of common stock issuable upon the exercise of stock options outstanding prior to this offering under our equity incentive plans;

Approximately 10,000,000 shares of common stock available for future grants under our equity incentive plans;

5,000,000 shares of common stock available for issuance under our Employee Stock Purchase Plan; and

Approximately 140,000 shares of common stock available for issuance under our 401(k) profit-sharing plan.

To the extent that any of these options or warrants are exercised, new options are issued under our equity incentive plans, additional shares of common stock are issued under our 401(k) profit-sharing plan or we otherwise issue additional shares of common stock in the future, there will be further dilution to the new investors.

DESCRIPTION OF SECURITIES WE ARE OFFERING

In this offering, we are offering a maximum of 6,622,517 units, consisting of 6,622,517 shares of common stock and warrants to purchase 2,649,007 shares of common stock. Each unit consists of one share of common stock and warrants to purchase 0.40 of a share of common stock at an exercise price of \$7.55 per share. This prospectus supplement also relates to the offering of shares of our common stock upon the exercise, if any, of the warrants issued

in this offering.

S-25

Table of Contents

Warrants

The material terms and provisions of the warrants being offered pursuant to this prospectus supplement and the accompanying prospectus are summarized below. This summary is subject to, and qualified in its entirety by, the form of warrant, which will be provided to the investors in this offering and will be filed as an exhibit to a current report on Form 8-K.

The warrants will provide for an exercise price of \$7.55 per share and will be exercisable at the option of the holder for a period of 90 days commencing 181 days following the closing date of the offering. The exercise price of the warrants will be subject to adjustment in the case of stock splits, stock dividends, combinations of shares and similar recapitalization transactions. The holder will not have the right to exercise any portion of the warrant if the holder, together with its affiliates, would, subject to limited exceptions, beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after the exercise. The holder may elect to change this beneficial ownership limitation from 4.99% to 9.99% of the number of shares of our common stock outstanding immediately after the exercise upon 61 days prior written notice to us.

The warrant holders must surrender payment in cash of the exercise price of the shares being acquired upon exercise of the warrants. If, however, we are unable to offer and sell the shares underlying these warrants pursuant to this prospectus supplement due to the ineffectiveness of the registration statement of which this prospectus supplement is a part, then the warrants may be exercised on a net or cashless basis.

Common Stock

The material terms and provisions of our common stock are described under the caption Description of Securities Capital Stock starting on page 11 of the accompanying prospectus.

PLAN OF DISTRIBUTION

We have entered into a placement agency agreement, dated as of September 18, 2009, with Rodman & Renshaw, LLC. Subject to the terms and conditions contained in the placement agency agreement, the placement agent has agreed to act as placement agent in connection with the sale of up to 6,622,517 shares of our common stock and warrants to purchase up to 2,649,007 shares of our common stock in this offering. The placement agent is not purchasing or selling any securities by this prospectus supplement and the accompanying prospectus, nor is the placement agent required to arrange the purchase or sale of any specific number or dollar amount of the securities, but has agreed to use its reasonable best efforts to arrange for the sale of all of the securities in this offering. There is no requirement that any minimum number of units or dollar amount of units be sold in this offering and there can be no assurance that we will sell all of the units being offered.

The placement agency agreement provides that the obligations of the placement agent and the investors are subject to certain conditions precedent, including, among other things, the absence of any material adverse change in our business.

We currently anticipate that the closing of this offering will take place no later than September 23, 2009. On the closing date, the following will occur:

we will receive funds in the amount of the aggregate purchase price;

the placement agent will receive the placement agent fees in accordance with the terms of the placement agency agreement; and

we will deliver the units to the investors.

Table of Contents

We have agreed to pay the placement agent an aggregate fee equal to 5% of the gross proceeds from the sale of the units in this offering (including proceeds received by us upon exercise of the warrants, if any). We have also agreed to reimburse the placement agent for expenses incurred by it in connection with this offering in an amount equal to 1% of the gross offering proceeds but in no event in excess of \$10,000. Under no circumstances will the fee, commission or discount received by the placement agent or any other member of the Financial Institutions Regulatory Authority, or FINRA, or independent broker-dealer exceed 8% of the gross proceeds to us in this offering or any other offering in the United States pursuant to this prospectus supplement and the accompanying prospectus.

The estimated offering expenses payable by us, in addition to the aggregate fee of \$2,500,000 due to the placement agent, are approximately \$25,000 which includes legal, and filing costs, and various other fees associated with registering the securities and listing the common stock. After deducting certain fees due to the placement agent and our estimated offering expenses, we expect the net proceeds from this offering to be approximately \$47.5 million if the maximum number of units are sold.

The following table shows the per unit and total commissions we will pay to the placement agent in connection with the sale of the units offered pursuant to this prospectus supplement and the accompanying prospectus, assuming the purchase of all of the units offered hereby and excluding proceeds that we may receive upon exercise of the warrants.

| | |
|-------------------------------|--------------|
| Per unit placement agent fees | \$ 0.38 |
| Maximum offering total | \$ 2,500,000 |

Because there is no minimum offering amount required as a condition to closing in this offering, the actual total offering fees, if any, are not presently determinable and may be substantially less than the maximum amount set forth above.

We have agreed to indemnify the placement agent and certain other persons against certain liabilities relating to or arising out of the placement agent's activities under the placement agency agreement. We have also agreed to contribute to payments the placement agent may be required to make in respect of such liabilities.

The placement agent has informed us that it will not engage in over allotment, stabilizing transactions or syndicate covering transactions in connection with this offering.

The transfer agent for our common stock is Computershare Trust Company, N.A.

Our common stock is traded on the NASDAQ Global Market under the symbol SPPI. The warrants to purchase common stock issued to the investors in this offering are not expected to be eligible for trading on any market.

The purchase price per unit and the exercise price for the warrants was determined based on negotiations with the investors and discussions with the placement agent.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon by Stradling Yocca Carlson & Rauth, a Professional Corporation, Newport Beach, California. The placement agent is being represented in connection with this offering by Weinstein & Smith LLP, New York, New York.

S-27

Table of Contents

EXPERTS

The consolidated financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control Over Financial Reporting) incorporated in this prospectus supplement by reference to the Annual Report on Form 10-K for the year ended December 31, 2008 have been so incorporated in reliance on the report of Kelly & Company, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 that we filed with the SEC registering the securities that may be offered and sold hereunder. The registration statement, including exhibits thereto, contains additional relevant information about us and these securities that, as permitted by the rules and regulations of the SEC, we have not included in this prospectus supplement or the accompanying prospectus. A copy of the registration statement can be obtained at the address set forth below. You should read the registration statement for further information about us and these securities.

We are subject to the information and periodic reporting requirements of the Exchange Act, and in accordance therewith file periodic reports, current reports, proxy statements and other information with the SEC. Such periodic reports, current reports, proxy statements, other information and copies of the registration statement may be inspected by anyone without charge and copies of these materials may be obtained upon the payment of the fees prescribed by the SEC, at the Public Reference Room maintained by the SEC at:

Public Reference Room
100 F Street, N.E.
Washington, D.C. 20549

The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The registration statement and the periodic reports, current reports, proxy statements and other information filed by us are also available through the Internet web site maintained by the SEC at the following address: <http://www.sec.gov>.

In addition, our common stock is listed on the NASDAQ Global Market and similar information concerning us can be inspected and copied at the offices of The NASDAQ Stock Market, LLC, One Liberty Plaza, 165 Broadway, New York, NY 10006.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference information into this prospectus supplement the information that we file with it. This means that we can disclose important information about us and our financial condition to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this prospectus supplement. This prospectus supplement incorporates by reference the documents listed below that we have previously filed with the SEC:

our annual report on Form 10-K for the fiscal year ended December 31, 2008, filed with the SEC on March 31, 2009;

our quarterly reports on Form 10-Q for the quarter ended March 31, 2009, filed with the SEC on May 15, 2009 and for the quarter ended June 30, 2009, filed with the SEC on August 13, 2009;

our current reports on Form 8-K, and amendments thereto, filed with the SEC on February 26, 2009, March 2, 2009, March 19, 2009, May 7, 2009, May 28, 2009, May 29, 2009, June 18, 2009, July 2, 2009 and September 4, 2009; and

the description of our common stock contained in the registration statement on Form 8-A, filed with the SEC on December 26, 2000, together with any amendments or reports filed for the purposes of updating such description.

Table of Contents

We also incorporate by reference all documents that we file with the SEC after the date of this prospectus supplement pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act and prior to the sale of all securities registered hereunder or termination of the registration statement. Nothing in this prospectus supplement shall be deemed to incorporate information furnished but not filed with the SEC.

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

You may request a copy of the filings incorporated herein by reference, including exhibits to such documents that are specifically incorporated by reference, at no cost, by writing or calling us at the following address or telephone number:

William N. Pedranti, Esq.
Vice President, General Counsel
Spectrum Pharmaceuticals, Inc.
157 Technology Drive
Irvine, California 92618
Telephone: (949) 788-6700

Statements contained in this prospectus supplement as to the contents of any contract or other documents are not necessarily complete, and in each instance investors are referred to the copy of the contract or other document filed as an exhibit to the registration statement, each such statement being qualified in all respects by such reference and the exhibits and schedules thereto.

S-29

Table of Contents

PROSPECTUS

SPECTRUM PHARMACEUTICALS, INC.

\$150,000,000

Debt Securities

Preferred Stock

Common Stock

Warrants

Units

This prospectus provides a general description of the following securities that may be offered hereunder from time to time: Spectrum Pharmaceuticals, Inc.'s debt securities, preferred stock, common stock, warrants and units. The aggregate initial offering price of all securities sold under this prospectus will not exceed \$150,000,000. Each time we sell securities hereunder, we will provide a supplement to this prospectus that contains specific information about the offering and the specific terms of the securities offered. You should read this prospectus and the applicable prospectus supplement carefully before you invest in our securities.

The common stock of Spectrum Pharmaceuticals, Inc. is listed on the Nasdaq Global Market under the symbol SPPI.

Investing in our securities involves a high degree of risk. See Risk Factors contained in our filings made with the Securities and Exchange Commission and the applicable prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is May 5, 2008.

Table of Contents**TABLE OF CONTENTS**

| | Page |
|--|-------------|
| <u>ABOUT THIS PROSPECTUS</u> | 3 |
| <u>THE COMPANY</u> | 4 |
| <u>USE OF PROCEEDS</u> | 5 |
| <u>RATIO OF EARNINGS TO FIXED CHARGES</u> | 5 |
| <u>RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED STOCK</u> | |
| <u>DIVIDENDS</u> | 5 |
| <u>FORWARD-LOOKING STATEMENTS</u> | 5 |
| <u>DESCRIPTION OF SECURITIES</u> | 6 |
| <u>DEBT SECURITIES</u> | 6 |
| <i>General</i> | 6 |
| <i>Modification and Waiver</i> | 7 |
| <i>Events of Default</i> | 8 |
| <i>Consolidation, Merger and Sale of Assets</i> | 9 |
| <i>Certain Covenants</i> | 9 |
| <i>Conversion Rights</i> | 9 |
| <i>Redemption; Repurchase at the Option of the Holder; Sinking Fund</i> | 9 |
| <i>Repurchases on the Open Market</i> | 10 |
| <i>Discharge, Defeasance and Covenant Defeasance</i> | 10 |
| <i>Applicable Law</i> | 11 |
| <u>CAPITAL STOCK</u> | 11 |
| <u>Common Stock</u> | 11 |
| <u>Stockholder Rights Plan</u> | 11 |
| <u>Certain Provisions of Delaware Law and of the Company's Certificate of Incorporation and Bylaws</u> | 12 |
| <u>Transfer Agent and Registrar</u> | 12 |
| <u>Preferred Stock</u> | 12 |
| <u>Terms</u> | 13 |
| <u>Transfer Agent</u> | 14 |
| <u>WARRANTS</u> | 14 |
| <u>Terms</u> | 14 |
| <u>Exercise of Warrants</u> | 15 |
| <u>UNITS</u> | 15 |
| <u>PLAN OF DISTRIBUTION</u> | 15 |
| <u>WHERE YOU CAN FIND MORE INFORMATION</u> | 17 |
| <u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u> | 17 |
| <u>EXPERTS</u> | 18 |
| <u>LEGAL MATTERS</u> | 18 |

Unless otherwise indicated or the context otherwise requires, the terms "Company," "Spectrum Pharmaceuticals," "we," "us" and "our" refer to Spectrum Pharmaceuticals, Inc., a Delaware corporation, and its predecessors and consolidated subsidiaries.

If you are in a jurisdiction where offers to sell, or solicitations of offers to purchase, the securities offered by this document are unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this prospectus does not extend to you.

We have not authorized anyone to give any information or make any representation about us that is different from, or in addition to that contained in this prospectus, including in any of the materials that we have incorporated by reference into this prospectus, any accompanying prospectus supplement, and any free writing prospectus prepared or authorized by us. Therefore, if anyone does give you information of this sort, you should not rely on it as authorized

by us. Neither the delivery of this prospectus, nor any sale made hereunder, shall under any circumstances create any implication that there has been no change in our affairs since the date hereof or that the information incorporated by reference herein is correct as of any time subsequent to the date of such information.

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a shelf registration process. Under this shelf registration statement, we may, from time to time, offer any combination of the securities described in this prospectus in one or more offerings. The aggregate initial offering price of all securities sold under this prospectus will not exceed \$150,000,000.

The types of securities that we may offer and sell from time to time by this prospectus are:

debt securities;

preferred stock;

common stock;

warrants; and

units, comprised of two or more of the following securities in any combination: debt securities, preferred stock, common stock and warrants.

We may issue debt securities convertible into shares of Spectrum Pharmaceuticals, Inc. common or preferred stock. The preferred stock issued may also be convertible into shares of Spectrum Pharmaceuticals, Inc. common stock or another series of its preferred stock.

This prospectus provides a general description of the securities that we may offer hereunder. Each time we sell securities hereunder, we will describe in a prospectus supplement, which we will deliver with this prospectus, specific information about the offering and the terms of the particular securities offered. In each prospectus supplement, we will include the following information:

the type and amount of securities that we propose to sell;

the public offering price of the securities;

the names of any underwriters, agents or dealers through or to which the securities will be sold;

any compensation of those underwriters, agents or dealers;

information about any securities exchanges or automated quotation systems on which the securities will be listed or traded;

any risk factors applicable to the securities that we propose to sell; and

any other material information about the offering and sale of the securities.

In addition, the prospectus supplement may also add, update or change the information contained in this prospectus.

Table of Contents

THE COMPANY

On March 7, 2008, we received approval from the U.S. Food and Drug Administration, or FDA, of our new drug application, or NDA, for our drug product, Levoleucovorin for Injection (formerly, ISO-Vorin™). We anticipate launching LEVOleucovorin in the U.S. market in mid-2008. Also, during the fourth quarter of 2008, we will launch sumatriptan injection, the generic form of GlaxoSmithKline's Imitrex® injection, through our commercialization partner, Par Pharmaceutical Companies, Inc. We are a biopharmaceutical company that acquires, develops and commercializes a diversified portfolio of drug products, with a focus on oncology, urology and other critical health challenges. We are focused on executing our business strategy, which is comprised of the following four parts:

Acquiring and developing a broad and diverse pipeline of late-stage clinical and commercial products with a focus on oncology and urology.

We acquire and develop multiple novel, late-stage oncology drug products that address niche markets. A late-stage focus helps us effectively manage the high cost of drug development by focusing on compounds that have already passed the many costly hurdles in the pre-clinical and early clinical process. Our strategy allows us to leverage organizational, collaborative, commercial and scientific efficiencies from a therapeutic focus on oncology and urology.

Establishing a commercial organization for LEVOleucovorin that will be available if and when each of the other drug products in our pipeline are approved. As we transform from a development to a commercial organization, we are building a foundation for successful product launches.

Continuing to build a team with significant drug development and commercialization expertise in our areas of focus and creating a culture of success that allows our people to thrive.

We have built the foundation of a team with significant experience in oncology and urology drug development. We endeavor to leverage the talents of our team and add people who have relevant experience. Our team members have, in the past, been responsible for the development of drugs such as adriamycin, cisplatin, carboplatin, paclitaxel, Etoposide, Buspar, Cialis, Nefazodone and Stadol, among others. We also have, and will continue to bring, commercialization experience to the Company as we build our commercial infrastructure.

Leveraging the expertise of partners around the world in areas of manufacturing, development and commercialization to assist us in the execution of our strategy.

We have incurred losses in every year of our existence and expect to continue to incur operating losses for the next several years. We may never generate significant revenue or become profitable because our drug product LEVOleucovorin for Injection may not achieve market acceptance and all of our other proprietary drug candidates are currently either in clinical trials and our clinical trials may fail, or we may not receive approval of the FDA, or even if approved, they may not become commercially viable or achieve market acceptance. Since it is unlikely that we will be able to generate the revenues necessary to finance our operations near-term, we will likely have to seek additional capital through the sale of our securities. However, we do not currently have plans to raise capital.

The pharmaceutical marketplace in which we operate is highly competitive, and includes many large, well-established companies pursuing treatments for the indications we are pursuing.

Spectrum Pharmaceuticals, Inc. is a Delaware corporation that was originally incorporated in Colorado as Americus Funding Corporation in December 1987, became NeoTherapeutics, Inc. in August 1996, was reincorporated in Delaware in June 1997, and was renamed Spectrum Pharmaceuticals, Inc. in December 2002. Our principal executive offices are located at 157 Technology Drive, Irvine, California 92618.

Table of Contents**USE OF PROCEEDS**

Unless we indicate otherwise in the applicable prospectus supplement, the net proceeds from the sale of the securities offered from time to time hereby will be used for general corporate purposes, including, without limitation, sales and marketing activities, clinical development, making acquisitions of assets, businesses or securities, capital expenditures and for working capital. When a particular series of securities is offered, the related prospectus supplement will set forth our intended use of the net proceeds we receive from the sale of the securities. Pending the application of the net proceeds, we may invest the proceeds in short-term, interest-bearing instruments or other securities.

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges for the periods indicated:

| | Year Ended December 31, | | | | |
|---------------------------------------|--------------------------------|-------------|-------------|-------------|-------------|
| | 2007 | 2006 | 2005 | 2004 | 2003 |
| Ratio of earnings to fixed charges(1) | N/A | N/A | N/A | N/A | N/A |

(1) Earnings have been inadequate to cover fixed charges. The dollar amount (in thousands) of the coverage deficiency in the five year period ended December 31, 2007 was approximately \$10,390, \$12,286, \$18,642, \$23,284, and \$34,036 for the years 2003, 2004, 2005, 2006 and 2007, respectively.

The ratios of earnings to fixed charges were computed by dividing earnings by fixed charges. For this purpose, earnings consist of pre-tax loss before fixed charges included in the determination of pre-tax loss. Fixed charges consist of interest costs, whether expensed or capitalized, the amortization of debt discount and issuance costs, and the interest factor of rental expense.

RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

The following table sets forth our ratio of earnings to combined fixed charges and preferred stock dividends for the periods indicated:

| | Year Ended December 31, | | | | |
|--|--------------------------------|-------------|-------------|-------------|-------------|
| | 2007 | 2006 | 2005 | 2004 | 2003 |
| Ratio of earnings to combined fixed charges and preferred share dividends(1) | N/A | N/A | N/A | N/A | N/A |

- (1) Earnings have been inadequate to cover fixed charges and preferred stock dividends. The dollar amount of the coverage deficiency in the five year period ended December 31, 2007 was approximately \$10,792, \$12,556, \$18,854, \$23,445 and \$34,055 for the years 2003, 2004, 2005, 2006 and 2007, respectively.

The ratio of earnings to combined fixed charges and preferred stock dividends is calculated in a similar manner to the ratio of earnings to fixed charges, except that preference dividends of Spectrum Pharmaceuticals are combined with fixed charges on a pre-tax basis, assuming a 40% tax rate. The deficiency amount is the amount of earnings required for a ratio of 1.0x.

FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference into this prospectus contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," and variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are based on current expectations, estimates and projections about our industry, management's beliefs, and assumptions made by management. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict; therefore, actual results may differ materially from those expressed or forecasted in any forward-looking statements. The risks and uncertainties include those noted in our SEC filings or any applicable prospectus supplement.

Table of Contents

We urge you to consider these factors carefully in evaluating the forward-looking statements contained in this prospectus and any prospectus supplement. All subsequent written or oral forward-looking statements attributable to our company or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. The forward-looking statements included in this prospectus are made only as of the date of this prospectus. We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent that we are required to do so by law.

DESCRIPTION OF SECURITIES

The following is a general description of the terms and provisions of the securities we may offer and sell by this prospectus. These summaries are not meant to be complete. This prospectus and the applicable prospectus supplement will contain the material terms and conditions of each security. The prospectus supplement may add, update or change the terms and conditions of the securities as described in this prospectus.

DEBT SECURITIES

The following sets forth certain general terms and provisions of the indenture under which the debt securities are to be issued, unless otherwise specified in a prospectus supplement. The particular terms of the debt securities to be sold by us will be set forth in a prospectus supplement relating to such debt securities.

The debt securities will represent unsecured general obligations of the Company, unless otherwise provided in the prospectus supplement. As indicated in the applicable prospectus supplement, the debt securities will either be senior debt or subordinated debt as described in the applicable prospectus supplement. Unless otherwise specified in the applicable prospectus supplement, the debt securities will be issued under an indenture between us and a trustee. The form of indenture has been filed as an exhibit to the registration statement of which this prospectus is a part, subject to such amendments or supplemental indentures as are adopted from time to time. The following summary of certain provisions of that indenture does not purport to be complete and is subject to, and qualified in its entirety by, reference to all the provisions of that indenture, including the definitions therein of certain terms. Wherever particular sections or defined terms of the indenture are referred to, it is intended that such sections or defined terms shall be incorporated herein by reference.

General

The indenture does not limit the amount of debt securities that may be issued thereunder. The applicable prospectus supplement with respect to any debt securities will set forth, if applicable, the following terms of the debt securities offered pursuant thereto: (i) the title and series of such debt securities, including CUSIP numbers; (ii) any limit upon the aggregate principal amount of such debt securities of such title or series; (iii) whether such debt securities will be in global or other form; (iv) the date(s) and method(s) by which principal and any premium on such debt securities is payable; (v) interest rate or rates (or method by which such rate will be determined), if any; (vi) the dates on which any such interest will be payable and the method of payment; (vii) whether and under what circumstances any additional amounts are payable with respect to such debt securities; (viii) the notice, if any, to holders of such debt securities regarding the determination of interest on a floating rate debt security; (ix) the basis upon which interest on such debt securities shall be calculated, if other than that of a 360 day year of twelve 30-day months; (x) the place or places where the principal of and interest or additional amounts, if any, on such debt securities will be payable; (xi) any redemption or sinking fund provisions; (xii) the denominations of such debt securities; (xiii) any rights of the holders of such debt securities to convert the debt securities into other securities or property; (xiv) the terms, if any, on which payment of principal or any premium, interest or additional amounts on such debt securities will be payable in a currency other than U.S. dollars; (xv) the terms, if any, by which the amount of payments of principal or any premium, interest or additional amounts on such debt securities may be determined by reference to an index, formula, financial or economic measure or other methods; (xvi) if other than the principal amount hereof, the portion of the principal amount of such debt securities that will be payable upon declaration of acceleration of the maturity thereof or provable in bankruptcy; (xvii) any events of default or covenants in addition to or in lieu of those described herein and remedies therefor; (xviii) whether such debt securities will be subject to defeasance or covenant defeasance; (xix) the terms, if any, upon which such debt securities are to be issuable upon the exercise of warrants; (xx) the trustee or trustees and any authenticating or paying agents, transfer agents or registrars or any other agents with respect to such debt securities; (xxi) the terms, if any, on which such debt securities will be subordinate to other debt

of the Company; and (xxii) any other specific terms of such debt securities and any other deletions from or additions to or modifications of the indenture with respect to such debt securities.

Table of Contents

Debt securities may be presented for exchange, conversion or transfer in the manner, at the places and subject to the restrictions set forth in the debt securities and the prospectus supplement. Such services will be provided without charge, other than any tax or other governmental charge payable in connection therewith, but subject to the limitations provided in the indenture.

The indenture does not contain any covenant or other specific provision affording protection to holders of the debt securities in the event of a highly leveraged transaction or a change in control of the Company, except to the limited extent described below under Consolidation, Merger and Sale of Assets. The Company's Certificate of Incorporation also contains other provisions which may prevent or limit a change of control. See Description of Capital Stock.

Modification and Waiver

The indenture provides that supplements to the indenture and the applicable supplemental indentures may be made by the Company and the trustee for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the indenture or of modifying in any manner the rights of the holders of debt securities of a series under the indenture or the debt securities of such series, with the consent of the holders of a majority (or such other amount as is provided for a particular series of debt securities) in principal amount of the outstanding debt securities issued under such indenture that are affected by the supplemental indenture, voting as a single class; provided that such supplemental indenture may include provisions that state that no such supplemental indenture may, without the consent of the holder of each such debt security affected thereby, among other things: (a) change the stated maturity of the principal of, or any premium, interest or additional amounts on, such debt securities, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest or any additional amounts thereon, or reduce any premium payable on redemption thereof, or reduce the amount of the principal of debt securities issued with original issue discount that would be due and payable upon an acceleration of the maturity thereof or the amount thereof provable in bankruptcy, or change the redemption provisions or adversely affect the right of repayment at the option of the holder, or change the place of payment or currency in which the principal of, or any premium, interest or additional amounts with respect to any debt security is payable, or impair or affect the right of any holder of debt securities to institute suit for the payment thereof or, if such debt securities provide therefor, any right of repayment at the option of the holder; (b) reduce the percentage of outstanding debt securities of any series, the consent of the holders of which is required for any such supplemental indenture, or the consent of whose holders is required for any waiver or reduce the quorum required for voting; (c) modify any of the provisions of the sections of such indenture relating to supplemental indentures with the consent of the holders, waivers of past defaults or securities redeemed in part, except to increase any such percentage or to provide that certain other provisions of such indenture cannot be modified or waived without the consent of each holder affected thereby; or (d) make any change that adversely affects the right to convert or exchange any security into or for common stock or other securities, cash or other property in accordance with the terms of the applicable debt security.

The indenture provides that a supplemental indenture that changes or eliminates any covenant or other provision of the indenture that has expressly been included solely for the benefit of one or more particular series of debt securities, or that modifies the rights of the holders of such series with respect to such covenant or other provision, shall be deemed not to affect the rights under the indenture of the holders of debt securities of any other series, unless it intends to do so.

Table of Contents

The indenture provides that the Company and the applicable trustee may, without the consent of the holders of any series of debt securities issued thereunder, enter into additional supplemental indentures for one of the following purposes: (1) to evidence the succession of another corporation to the Company and the assumption by any such successor of the covenants of the Company in such indenture and in the debt securities issued thereunder; (2) to add to the covenants of the Company or to surrender any right or power conferred on the Company pursuant to the Indenture; (3) to establish the form and terms of debt securities issued thereunder; (4) to evidence and provide for a successor trustee under such indenture with respect to one or more series of debt securities issued thereunder or to provide for or facilitate the administration of the trusts under such indenture by more than one trustee; (5) to cure any ambiguity, to correct or supplement any provision in the indenture that may be inconsistent with any other provision of the indenture or to make any other provisions with respect to matters or questions arising under such indenture which shall not adversely affect the interests of the holders of any series of debt securities issued thereunder in any material respect; (6) to add to, delete from or revise the conditions, limitations and restrictions on the authorized amount, terms or purposes of issue, authentication and delivery of securities under the indenture; (7) to add any additional events of default with respect to all or any series of debt securities; (8) to supplement any of the provisions of the indenture as may be necessary to permit or facilitate the defeasance and discharge of any series of debt securities, provided that such action does not adversely affect the interests of any holder of an outstanding debt security of such series or any other security in any material respect; (9) to make provisions with respect to the conversion or exchange rights of holders of debt securities of any series; (10) to amend or supplement any provision contained in such indenture or any supplemental indenture, provided that no such amendment or supplement shall materially adversely affect the interests of the holders of any debt securities then outstanding; or (11) to qualify such indenture under the Trust Indenture Act of 1939.

Events of Default

Unless otherwise provided in any prospectus supplement, the following will be events of default under the indenture with respect to each series of debt securities issued thereunder: (a) default in the payment of principal (or premium, if any) or any additional amounts with respect to such principal or premium on any series of the debt securities outstanding under the indenture when due; (b) default in the payment of any interest or any additional amounts with respect to such interest on any series of the debt securities outstanding under the indenture when due, continued for 30 days; (c) default in the payment, if any, of any sinking fund installment when and as due by the terms of any debt security of such series, subject to any cure period that may be specified in any debt security of such series; (d) failure to perform any other covenant or warranty of the Company contained in such indenture or such debt securities continued for 90 days after written notice; (e) certain events of bankruptcy, insolvency or reorganization of the Company; and (f) any other event of default provided in a supplemental indenture with respect to a particular series of debt securities. Unless otherwise provided in any prospectus supplement, in case an event of default other than a default specified in clause (e) above shall occur and be continuing with respect to any series of such debt securities, the applicable trustee or the holders of not less than 25% in aggregate principal amount of the debt securities of such series then outstanding (each such series acting as a separate class) may declare the principal (or, in the case of discounted debt securities, the amount specified in the terms thereof) of such series to be due and payable. Unless otherwise provided in any prospectus supplement, if an event of default described in (e) above shall occur and be continuing then the principal amount (or, in the case of discounted debt securities, the amount specified in the terms thereof) of all the debt securities outstanding shall be and become due and payable immediately, without notice or other action by any holder or the applicable trustee, to the full extent permitted by law. Unless otherwise provided in any prospectus supplement, any event of default with respect to particular series of debt securities under such indenture may be waived by the holders of a majority in aggregate principal amount of the outstanding debt securities of such series (voting as a class), except in each case a failure to pay principal of or premium, interest or additional amounts, if any, on such debt securities or a default in respect of a covenant or provision which cannot be modified or amended without the consent of each holder affected thereby.

The indenture provides that the applicable trustee may withhold notice to the holders of any default with respect to any series of debt securities (except in payment of principal of or interest or premium on, or sinking fund payment in respect of, the debt securities) if the applicable trustee considers it in the interest of holders to do so.

Table of Contents

The indenture contains a provision entitling the applicable trustee to be indemnified by the holders before proceeding to exercise any trust or power under such indenture at the request of such holders. The indenture provides that the holders of a majority in aggregate principal amount of the then outstanding debt securities of any series may direct the time, method and place of conducting any proceedings for any remedy available to the applicable trustee or of exercising any trust or power conferred upon the applicable trustee with respect to the debt securities of such series; provided, however, that the applicable trustee may decline to follow any such direction if, among other reasons, the applicable trustee determines in good faith that the actions or proceedings as directed may not lawfully be taken or would be unduly prejudicial to the holders of the debt securities of such series not joining in such direction. The right of a holder to institute a proceeding with respect to the applicable indenture will be subject to certain conditions precedent including, without limitation, that the holders of not less than 25% in aggregate principal amount of the debt securities of such series then outstanding under such indenture make a written request upon the applicable trustee to exercise its powers under such indenture, indemnify the applicable trustee and afford the applicable trustee reasonable opportunity to act, but the holder has an absolute right to receipt of the principal of, premium, if any, and interest when due on the debt securities, to require conversion of debt securities if such indenture provides for convertibility at the option of the holder and to institute suit for the enforcement thereof.

Consolidation, Merger and Sale of Assets

Unless otherwise provided in any prospectus supplement, the indenture will provide that the Company may not consolidate with, merge into or sell, convey or lease all or substantially all of its assets to any person unless the successor person assumes the Company's obligations on the debt securities issued thereunder, and under such indenture.

Certain Covenants

Existence. Except as permitted under Consolidation, Merger or Sale of Assets, the indenture requires the Company to do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence, rights (by certificate of incorporation, bylaws and statute) and franchises; provided, however, that the Company will not be required to preserve any right or franchise if its board of directors determines that the preservation thereof is no longer desirable in the conduct of its business.

Calculation of Original Issue Discount. The Company shall file with the trustee promptly at the end of each calendar year a written notice specifying the amount of original issue discount accrued on outstanding securities at the end of such year and any other specific information as may then be relevant under the Internal Revenue Code of 1986, as amended.

Additional Covenants. Any additional covenants of the Company with respect to any series of debt securities will be set forth in the prospectus supplement relating thereto.

Conversion Rights

The terms and conditions, if any, upon which the debt securities are convertible into common stock or preferred stock will be set forth in the applicable prospectus supplement relating thereto. Such terms will include, if applicable, the conversion price (or manner of calculation thereof), the conversion period, provisions as to whether conversion will be at the option of the holders or the Company, the events requiring an adjustment of the conversion price and provisions affecting conversion in the event of redemption of such debt securities and any restrictions on conversion.

Redemption; Repurchase at the Option of the Holder; Sinking Fund

The terms and conditions, if any, upon which (i) the debt securities are redeemable at the option of the Company, (ii) the holder of debt securities may cause the Company to repurchase such debt securities or (iii) the debt securities are subject to any sinking fund will be set forth in the applicable prospectus supplement relating thereto.

Table of Contents***Repurchases on the Open Market***

The Company or any affiliate of the Company may at any time or from time to time repurchase any debt security in the open market or otherwise. Such debt securities may, at the option of the Company or the relevant affiliate of the Company, be held, resold or surrendered to the trustee for cancellation.

Discharge, Defeasance and Covenant Defeasance

The indenture provides, with respect to each series of debt securities issued thereunder, that the Company may terminate its obligations under such debt securities of a series and such indenture with respect to debt securities of such series if: (i) all debt securities of such series previously authenticated and delivered, with certain exceptions, have been delivered to the applicable trustee for cancellation and the Company has paid all sums payable by it under the indenture; or (ii) (A) the debt securities of such series mature within one year or all of them are to be called for redemption within one year under arrangements satisfactory to the applicable trustee for giving the notice of redemption, (B) the Company irrevocably deposits in trust with the applicable trustee, as trust funds solely for the benefit of the holders of such debt securities, for that purpose, money or U.S. government obligations or a combination thereof sufficient (unless such funds consist solely of money, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the applicable trustee), without consideration of any reinvestment, to pay principal of and interest on the debt securities of such series to maturity or redemption, as the case may be, and to pay all other sums payable by it under such indenture, and (C) the Company delivers to the applicable trustee an officers' certificate and an opinion of counsel, in each case stating that all conditions precedent provided for in such indenture relating to the satisfaction and discharge of such indenture with respect to the debt securities of such series have been complied with. With respect to the foregoing clause (i), only the Company's obligations to compensate and indemnify the applicable trustee under the indenture shall survive. With respect to the foregoing clause (ii) only the Company's obligations to execute and deliver debt securities of such series for authentication, to maintain an office or agency in respect of the debt securities of such series, to have moneys held for payment in trust, to register the transfer or exchange of debt securities of such series, to deliver debt securities of such series for replacement or to be canceled, to compensate and indemnify the applicable trustee and to appoint a successor trustee, and its right to recover excess money held by the applicable trustee shall survive until such debt securities are no longer outstanding. Thereafter, only the Company's obligations to compensate and indemnify the applicable trustee and its right to recover excess money held by the applicable trustee shall survive.

The indenture provides that the Company (i) will be deemed to have paid and will be discharged from any and all obligations in respect of the debt securities issued thereunder of any series, and the provisions of such indenture will, except as noted below, no longer be in effect with respect to the debt securities of such series and (ii) may omit to comply with any term, provision, covenant or condition of such indenture, and such omission shall be deemed not to be an event of default under clause (d) of the first paragraph of Events of Default with respect to the outstanding debt securities of such series; provided that the following conditions shall have been satisfied: (A) the Company has irrevocably deposited in trust with the applicable trustee as trust funds solely for the benefit of the holders of the debt securities of such series, for payment of the principal of and interest of the debt securities of such series, which funds shall consist of cash or U.S. Government Obligations or a combination thereof sufficient (, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the applicable trustee, without consideration of any reinvestment , to pay and discharge the principal of and accrued interest on the outstanding debt securities of such series to maturity or earlier redemption (irrevocably provided for under arrangements satisfactory to the applicable trustee), as the case may be; (B) such deposit will not result in a breach or violation of, or constitute a default under, such indenture or any other material agreement or instrument to which the Company is a party or by which it is bound; (C) no default with respect to such debt securities of such series shall have occurred and be continuing on the date of such deposit; (D) the Company shall have delivered to such trustee an opinion of counsel that (1) the holders of the debt securities of such series will not recognize income, gain or loss for Federal income tax purposes as a result of the Company's exercise of its option under this provision of such indenture and will be subject to federal income tax on the same amount and in the same manner and at the same times as would have been the case if such deposit and defeasance had not occurred, and (2) the holders of the debt securities of such series have a valid security interest in the trust funds subject to no prior liens under the Uniform Commercial

Code; and (E) the Company has delivered to the applicable trustee an officers' certificate and an opinion of counsel, in each case stating that all conditions precedent provided for in such indenture relating to the defeasance contemplated have been complied with. In the case of legal defeasance under clause (i) above, the opinion of counsel referred to in clause (D)(1) above may be replaced by a ruling directed to the applicable trustee received from the Internal Revenue Service to the same effect. Subsequent to a legal defeasance under clause (i) above, the Company's obligations to execute and deliver debt securities of such series for authentication, to maintain an office or agency in respect of the debt securities of such series, to have moneys held for payment in trust, to register the transfer or exchange of debt securities of such series, to deliver debt securities of such series for replacement or to be canceled, to compensate and indemnify the applicable trustee and to appoint a successor trustee, and its right to recover excess money held by the applicable trustee shall survive until such debt securities are no longer outstanding. After such debt securities are no longer outstanding, in the case of legal defeasance under clause (i) above, only the Company's obligations to compensate and indemnify the applicable trustee and its right to recover excess money held by the applicable trustee shall survive.

Table of Contents

Applicable Law

The indenture provides that the debt securities and the indenture will be governed by and construed in accordance with the laws of the State of New York.

CAPITAL STOCK

Our authorized capital stock consists of 100,000,000 shares of common stock, \$0.001 par value, and 5,000,000 shares of preferred stock, \$0.001 par value. Our Certificate of Incorporation, as amended to date, does not authorize any other classes of capital stock.

Common Stock

As of March 31, 2008 there were 31,461,396 shares of common stock outstanding and approximately 389 shareholders of record. Holders of our common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. The holders of common stock are not entitled to cumulative voting rights with respect to election of directors, and as a consequence, minority stockholders will not be able to elect directors on the basis of their shares alone. Our Board of Directors currently consists of six Directors each of whom is elected annually. No dividend on our common stock may be paid unless, at the time of such payment, we have on hand cash and other liquid assets sufficient to pay in full, in cash, the liquidation preference that would be payable to the holders of the preferred stock, if any, as if such liquidation preference were then payable. Subject to this preference and the preferences that may be applicable to the holders of any other class of our preferred stock, if any, the holders of our common stock are entitled to receive ratably such lawful dividends as may be declared by the Board of Directors.

In the event of liquidation, dissolution or winding up of Spectrum Pharmaceuticals, before any distribution of our assets shall be made to or set apart for the holders of our common stock, the holders, if any, of our Series E Convertible Voting Preferred Stock shall be entitled to receive payment out of our assets in an amount equal to the liquidation preference set forth in the Certificate of Designations for the preferred stock. If the assets available for distribution to stockholders exceed the aggregate amount of the liquidation preference with respect to all shares of the preferred stock then outstanding, then the holders of our common stock shall be entitled to receive, subject to the rights of the holders of any other class of our preferred stock, if any, pro rata all of our remaining assets available for distribution to our stockholders.

Our common stock has no preemptive or conversion rights, other subscription rights, or redemption or sinking fund provisions. All outstanding shares of our common stock are fully paid and nonassessable. The rights, powers, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock.

Stockholder Rights Plan

On December 13, 2000, we adopted a Stockholder Rights Plan pursuant to which we have distributed rights to purchase units of our Series B Junior Participating Preferred Stock. The rights become exercisable upon the earlier of ten days after a person or group of affiliated or associated persons has acquired 15% or more of the outstanding shares of our common stock or ten business days after a tender offer has commenced that would result in a person or group beneficially owning 15% or more of our outstanding common stock, other than pursuant to a transaction approved in advance by our Board of Directors. The description and terms of the rights are set forth in a Rights Agreement between us and ComputerShare Trust Company, N.A., as rights agent, filed with the Securities and Exchange Commission on December 26, 2000, as Exhibit 4.1 to our Form 8-A, as amended by Amendment No. 1 dated July 23, 2003, filed with the Securities and Exchange Commission on August 14, 2003, as Exhibit 4.1 to our Form 10-Q for the period ended June 30, 2003, Amendments No. 2 and No. 3 dated May 10, 2004, filed with the Securities and Exchange Commission on May 17, 2004 as Exhibits 4.1 and 4.2 respectively to our Form 10-Q for the period ended March 30, 2004, the Fourth Amendment dated July 7, 2006, filed as Exhibit 4.1 to our Form 8-K filed with the Securities and Exchange Commission on July 12, 2006, and Amendment No. 5 dated September 26, 2006, filed with the Securities and Exchange Commission on November 3, 2006 as Exhibit 4.2 to our Form 10-Q for the period ended September 30, 2006.

Table of Contents

Certain Provisions of Delaware Law and of the Company's Certificate of Incorporation and Bylaws

The following paragraphs summarize certain provisions of the Delaware General Corporation Law and the Company's Certificate of Incorporation and Bylaws. The summary does not purport to be complete and is subject to and qualified in its entirety by reference to the Delaware General Corporation Law and to the Company's Certificate of Incorporation and Bylaws, copies of which are on file with the Commission. See [Where You Can Find More Information](#).

Our Certificate of Incorporation and Bylaws contain provisions that, together with the ownership position of the officers, directors and their affiliates, could discourage potential takeover attempts and make it more difficult for stockholders to change management, which could adversely affect the market price of our common stock.

Our Certificate of Incorporation limits the extent to which our directors are personally liable to Spectrum Pharmaceuticals and our stockholders, to the fullest extent permitted by the Delaware General Corporation Law, or DGCL. The inclusion of this provision in our Certificate of Incorporation may reduce the likelihood of derivative litigation against directors and may discourage or deter stockholders or management from bringing a lawsuit against directors for breach of their duty of care.

Our Bylaws provide that special meetings of stockholders can be called only by the Board of Directors, the Chairman of the Board of Directors or the Chief Executive Officer. Stockholders are not permitted to call a special meeting and cannot require the Board of Directors to call a special meeting. There is no right of stockholders to act by written consent without a meeting, unless the consent is unanimous. Any vacancy on the Board of Directors resulting from death, resignation, removal or otherwise or newly created directorships may be filled only by vote of the majority of directors then in office, or by a sole remaining director. Our Bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, except for nominations made by or at the direction of the board of directors or a committee of the board.

In addition to our rights agreement, our Certificate of Incorporation and our Bylaws, certain provisions of Delaware law may make the acquisition of the company by tender offer, a proxy contest or otherwise, or the removal of our officers and directors, more difficult. For example, we are subject to the business combination statute of the DGCL, an anti-takeover law enacted in 1988. Section 203 of the DGCL prohibits certain publicly-held Delaware corporations from engaging in a business combination with an interested stockholder for a period of three years following the time such person became an interested stockholder unless the business combination is approved in a specified manner. Generally, an interested stockholder is a person who, together with its affiliates and associates, owns 15% or more of the corporation's voting stock, or is affiliated with the corporation and owns or owned 15% of the corporation's voting stock within three years before the business combination. In addition, our Certificate of Incorporation sets forth additional required approvals for business combinations with (1) a stockholder that owns 5% or more of our voting stock, or (2) is an affiliate or associate of ours and was the owner of 5% or more of our voting stock at any time within the three-year period prior to the determination time, or (3) is an affiliate or associate of the persons described in (1) and (2).

Transfer Agent and Registrar

Our common stock is listed under the symbol **SPPI** on the Nasdaq Global Market. Computershare Trust Company, N.A. is the Transfer Agent and Registrar for our common stock.

Preferred Stock

The Company is authorized to issue a total of 5,000,000 shares of preferred stock. Of the 5,000,000 authorized shares, the Company is authorized to issue 1,000,000 shares of Series B Junior Participating Preferred Stock and 2,000 shares of Series E Convertible Voting Preferred Stock. As of March 31, 2008, 170 shares of Series E Convertible Voting Preferred Stock were issued and outstanding.

Table of Contents

Each share of Series E Preferred Stock is convertible into a number of shares of Spectrum Pharmaceuticals common stock equal to the quotient obtained by dividing the sum of a stated value of \$10,000 by a conversion price of \$5.00, subject to adjustment in certain circumstances. There are no dividends payable on the Preferred Stock.

Each share of Series E Preferred Stock has a liquidation preference equal to 120% of the stated value of \$10,000 plus any declared and unpaid dividends on such share, subject to adjustment in certain circumstances.

Holders of our Series E Preferred Stock have full voting rights and powers equal to the voting rights and powers of holders of common stock, and are entitled to the number of votes equal to the number of shares of common stock into which their shares of Series E Preferred Stock can be converted. Pursuant to the Certificates of Designations for the Series E Preferred Stock, the number of shares of our common stock that may be acquired by any holder of Series E Preferred Stock upon any conversion of the preferred stock, or that shall be entitled to voting rights, is limited to the extent necessary to ensure that following such conversion, the number of shares of our common stock then beneficially owned by such holder and any other person or entities whose beneficial ownership of common stock would be aggregated with the holder's for purposes of the Securities and Exchange Act of 1934, as amended, does not exceed 4.95% of the total number of shares of our common stock then outstanding.

Terms

Preferred stock may be issued from time to time, in one or more series, as authorized by the board of directors. The prospectus supplement relating to the preferred shares offered thereby will include specific terms of any preferred shares offered, including, if applicable:

the title of the shares of preferred stock;

the number of shares of preferred stock offered, the liquidation preference per share and the offering price of the shares of preferred stock;

the dividend rate(s), period(s) and/or payment date(s) or method(s) of calculation thereof applicable to the shares of preferred stock;

whether the shares of preferred stock are cumulative or not and, if cumulative, the date from which dividends on the shares of preferred stock shall accumulate;

the procedures for any auction and remarketing, if any, for the shares of preferred stock;

the provision for a sinking fund, if any, for the shares of preferred stock;

the provision for redemption, if applicable, of the shares of preferred stock;

any listing of the shares of preferred stock on any securities exchange;

the terms and conditions, if applicable, upon which the shares of preferred stock will be convertible into common shares, including the conversion price (or manner of calculation thereof);

a discussion of federal income tax considerations applicable to the shares of preferred stock;

the relative ranking and preferences of the shares of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of our affairs;

any limitations on issuance of any series or class of shares of preferred stock ranking senior to or on a parity with such series or class of shares of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of our affairs;

any other specific terms, preferences, rights, limitations or restrictions of the shares of preferred stock; and any voting rights of such preferred stock.

Table of Contents

Transfer Agent

The transfer agent and registrar for any series or class of preferred stock will be set forth in the applicable prospectus supplement.

WARRANTS

As of March 31, 2008, we had warrants to purchase 9,679,829 shares of our common stock outstanding, held of record by approximately 59 security holders, of which warrants to purchase 9,562,329 shares of our common stock were exercisable. We typically issue warrants to purchase shares of our common stock to investors as part of a financing transaction, or in connection with services rendered by placement agents and outside consultants. Our outstanding warrants expire at varying dates commencing May 2008 through September 2013.

Terms

We may issue warrants for the purchase of our preferred stock, common stock or units of two or more of these types of securities. Warrants may be issued independently or together with preferred stock or common stock and may be attached to or separate from these securities. Each series of warrants will be issued under a separate warrant agreement. We will distribute a prospectus supplement with regard to each issue or series of warrants. Each such prospectus supplement will describe, as applicable:

the title of the warrants;

the aggregate number of warrants to be issued and currently outstanding, if any;

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

the number or principal amount of securities purchasable upon exercise of the warrants and the exercise price of each warrant;

the procedures and conditions relating to the exercise of the warrants including:

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

the maximum or minimum number of the warrants which may be exercised at any time; and

any limitations relating to the exchange and exercise of such warrants;

any provisions for adjustment of the number or amount of shares of our preferred or common stock receivable upon exercise of the warrants or the exercise price of the warrants;

in the case of warrants to purchase preferred stock, the designation, stated value and terms, such as liquidation, dividend, conversion and voting rights, of the series of preferred stock purchasable upon exercise of the warrants;

if applicable, the number of warrants issued with each share of our preferred or common stock, and the date on and after which the warrants and the related securities will be separately transferable;

if applicable, a discussion of any material federal income tax considerations; and

any other material terms of such warrants.

Table of Contents

Exercise of Warrants

Each warrant will entitle the holder of the warrant to purchase the securities, at the exercise price as shall be set forth in, or be determinable as set forth in, the prospectus supplement relating to the warrants. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Upon receipt of payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the securities purchased upon such exercise. If less than all of the warrants represented by a warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

Prior to the exercise of any warrants, holders of the warrants will not have any of the rights of holders of the securities purchasable upon exercise, including the right to vote or to receive any payments of dividends on the preferred or common stock purchasable upon exercise.

Certificates for warrants to purchase securities will be exchangeable for new warrant certificates of different denominations to the extent set forth in the prospectus supplement.

UNITS

As specified in the applicable prospectus supplement, units will be comprised of two or more of the following securities in any combination: debt securities, preferred stock, common stock and warrants. You should refer to the applicable prospectus supplement for:

all terms of the units and of the debt securities, preferred stock, common stock and warrants comprising the units, including whether and under what circumstances the securities comprising the units may or may not be traded separately;

a description of the terms of any unit agreement governing the units; and

a description of the provisions for the payment, settlement, transfer or exchange of the units.

PLAN OF DISTRIBUTION

The securities that may be offered by this prospectus may be sold:

through agents;

to or through underwriters;

to or through broker-dealers (acting as agent or principal);

in at the market offerings within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange, or otherwise;

directly to purchasers, through a specific bidding or auction process or otherwise; or

through a combination of any such methods of sale.

Agents, underwriters or broker-dealers may be paid compensation for offering and selling the securities. That compensation may be in the form of discounts, concessions or commissions to be received from us, from the purchasers of the securities or from both us and the purchasers. The compensation received may be in excess of customary discounts, concessions or commissions. Any underwriters, dealers, agents or other investors participating in the distribution of the securities may be deemed to be underwriters, as that term is defined in the Securities Act, and compensation and profits received by them on sale of the securities may be deemed to be underwriting commissions, as that term is defined in the rules promulgated under the Securities Act.

Table of Contents

Each time the securities are offered by this prospectus, the prospectus supplement, if required, will set forth:
the name of any underwriter, dealer or agent involved in the offer and sale of the securities;

the terms of the offering;

any discounts concessions or commissions and other items constituting compensation received by the underwriters, broker-dealers or agents;

any over-allotment option under which any underwriters may purchase additional securities from us;

any initial public offering price;

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

any securities exchanges on which the securities may be listed; and

the anticipated date of delivery of the securities.

The securities may be sold at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices relating to the prevailing market prices or at negotiated prices. The distribution of securities may be effected from time to time in one or more transactions, by means of one or more of the following transactions, which may include crosses or block trades:

exchange offers or other transactions on the Nasdaq Global Market or any other organized market where the securities may be traded;

in the over-the-counter market;

in negotiated transactions;

through put or call option transactions relating to the securities;

under delayed delivery contracts or other contractual commitments; or

a combination of such methods of sale.

If underwriters are used in a sale, securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions. Securities may be offered to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. If an underwriter or underwriters are used in the sale of securities, an underwriting agreement will be executed with the underwriter or underwriters at the time an agreement for the sale is reached. This prospectus and the prospectus supplement will be used by the underwriters to resell the securities.

To comply with the securities laws of certain states, if applicable, the securities offered by this prospectus will be offered and sold in those states only through registered or licensed brokers or dealers.

Agents, underwriters and dealers may be entitled under agreements entered into with us to indemnification by us against specified liabilities, including liabilities incurred under the Securities Act, or to contribution by us to payments they may be required to make in respect of such liabilities. The prospectus supplement will describe the terms and conditions of such indemnification or contribution. Some of the agents, underwriters or dealers, or their respective affiliates may be customers of, engage in transactions with or perform services for us in the ordinary course of business. We will describe in the prospectus supplement naming the underwriter the nature of any such relationship.

Our common stock is listed on the Nasdaq Global Market. Unless otherwise specified in the applicable prospectus supplement, each other class or series of securities issued will be a new issue with no established trading market. We

may elect to list any other class or series of securities on any exchange, but we are not currently obligated to do so. It is possible that one or more underwriters, if any, may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the securities.

Table of Contents

Certain persons participating in the offering may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. We make no representation or prediction as to the direction or magnitude of any effect that such transactions may have on the price of the securities. For a description of these activities, see the information under the heading "Underwriting" in the applicable prospectus supplement.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC registering the securities that may be offered and sold hereunder. The registration statement, including exhibits thereto, contains additional relevant information about us and these securities that, as permitted by the rules and regulations of the SEC, we have not included in this prospectus. A copy of the registration statement can be obtained at the address set forth below. You should read the registration statement for further information about us and these securities.

We file annual, quarterly and special reports, proxy statements and other information with the SEC under the Securities Exchange Act of 1934, as amended, or the Exchange Act. You may read and copy this information at the following SEC location:

Public Reference Room
100 F Street, N.E.
Washington, D.C. 20549

You may obtain information on the operation of the Public Reference Room by calling the SEC at (800) SEC-0330. The SEC also maintains a web site that contains reports, proxy statements, information statements and other information about issuers, like Spectrum Pharmaceuticals, Inc., who file electronically with the SEC. The address of that web site is www.sec.gov.

In addition, our common stock is listed on the Nasdaq Global Market and similar information concerning us can be inspected and copied at the offices of The Nasdaq Stock Market, One Liberty Plaza, 165 Broadway, New York, NY 10006.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference information into this prospectus. This means that we can disclose important information about us and our financial condition to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this prospectus. This prospectus incorporates by reference the documents listed below that we have previously filed with the SEC:

Our Annual Report on Form 10-K for the year ended December 31, 2007 filed with the SEC on March 14, 2008;

Our Current Reports on Form 8-K filed with the SEC on March 11, 2008, March 27, 2008 and April 30, 2008;

The description of our common stock contained in the Registration of Securities of Certain Successor Issuers filed pursuant to Section 12(g) of the Exchange Act on Form 8-B on June 27, 1997, including any amendment or reports filed for the purpose of updating such description; and

The description of our Rights to Purchase Series B Junior Participating Preferred Stock contained in the Registration of Certain Classes of Securities filed pursuant to Section 12(g) of the Exchange Act on Form 8-A on December 26, 2000, including any amendment or reports filed for the purpose of updating such description.

Table of Contents

We also incorporate by reference all documents that we file with the SEC after the date of this prospectus pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act and prior to the sale of all securities registered hereunder or termination of the registration statement. Nothing in this prospectus shall be deemed to incorporate information furnished but not filed with the SEC.

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

You may request a copy of the filings incorporated herein by reference, including exhibits to such documents that are specifically incorporated by reference, at no cost, by writing or calling us at the following address or telephone number:

William N. Pedranti, Esq.
Vice President, General Counsel
Spectrum Pharmaceuticals, Inc.
157 Technology Drive
Irvine, California 92618
Telephone: (949) 788-6700

Statements contained in this prospectus as to the contents of any contract or other documents are not necessarily complete, and in each instance investors are referred to the copy of the contract or other document filed as an exhibit to the registration statement, each such statement being qualified in all respects by such reference and the exhibits and schedules thereto.

EXPERTS

Our consolidated financial statements appearing in our Annual Report on Form 10-K for the year ended December 31, 2007 and the effectiveness of internal control over financial reporting as of December 31, 2007 included therein have been audited by Kelly & Company, our independent registered public accounting firm, as set forth in its reports included therein, and incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements and management's assessment are incorporated herein by reference in reliance upon such reports given, on the authority of Kelly & Company as experts in accounting and auditing.

LEGAL MATTERS

Gibson, Dunn & Crutcher LLP of Irvine, California will issue an opinion with respect to the validity of the securities to be offered and sold by this prospectus. If counsel for any underwriters passes on legal matters in connection with an offering of the securities described in this prospectus, we will name that counsel in the prospectus supplement relating to that offering.