BIOCRYST PHARMACEUTICALS INC
Form 424B2
November 20, 2009

Table of Contents

Filed Pursuant to Rule 424(b)(2)
Registration No. 333-155783

PROSPECTUS SUPPLEMENT
(To Prospectus dated January 27, 2009)

5,000,000 Shares

BioCryst Pharmaceuticals, Inc.

COMMON STOCK

BioCryst Pharmaceuticals, Inc. is offering 5,000,000 shares of its common stock.

Our common stock is listed on The Nasdaq Global Market under the symbol BCRX. On November 19, 2009, the reported last sale price of our common stock on The Nasdaq Global Market was $10.40 per share.

Investing in our common stock involves risks. See Risk Factors beginning on page S-7 of this prospectus supplement.

PRICE $9.75 A SHARE

	Price to Public	***Underwriting Discounts and Commissions***	***Proceeds to BioCryst***
Per Share	*$9.75*	*$.53625*	*$9.21375*

Total	*$48,750,000*	*$2,681,250*	*$46,068,750*

We have granted the underwriters the right to purchase up to an additional 750,000 shares to cover over-allotments.

The Securities and Exchange Commission and state securities regulators have not 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.

Morgan Stanley & Co. Incorporated expects to deliver the shares to purchasers on November 25, 2009.

MORGAN STANLEY

JMP SECURITIES ***OPPENHEIMER & CO.***

November 19, 2009

TABLE OF CONTENTS

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This document consists of two parts. The first part is the prospectus supplement, which describes the specific terms of this offering of our common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus. The second part is the accompanying prospectus, or the base prospectus, which describes more general information, some of which may not apply to this offering. You should read both this prospectus supplement and the accompanying prospectus, together with the additional information described under the caption Where You Can Find More Information below.

When acquiring any securities discussed in this prospectus supplement, you should rely only on the information provided in this prospectus supplement and the accompanying prospectus, including the information incorporated by reference. Neither we nor any underwriters have authorized anyone to provide you with different information. We are not offering the common stock in any jurisdiction where the offer is prohibited. You should not assume that the information in this prospectus supplement, the accompanying prospectus, or any document incorporated by reference is accurate or complete at any date other than the respective dates of such documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

If the information set forth in this prospectus supplement differs in any way from the information set forth in the accompanying prospectus, you should rely on the information set forth in this prospectus supplement. If the information conflicts with any statement in a document which we have incorporated by reference, then you should consider only the statement in the more recent document.

Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus supplement and the accompanying prospectus to the Company, we, us and our refer to BioCryst Pharmaceuticals, Inc.

Table of Contents

PROSPECTUS SUPPLEMENT SUMMARY

This summary does not contain all of the information that you should consider before investing in our common stock. You should read this entire prospectus supplement and the accompanying prospectus carefully, including the Risk Factors section of this prospectus supplement beginning on page S-7 and the financial statements and other information incorporated by reference in this prospectus supplement and the accompanying prospectus, before making an investment decision.

BioCryst Pharmaceuticals Inc.

We are a biotechnology company that designs, optimizes and develops novel drugs that block key enzymes involved in cancer, viral infections and autoimmune diseases. We integrate the disciplines of biology, crystallography, medicinal chemistry and computer modeling to discover and develop small molecule pharmaceuticals through the process known as structure-based drug design.

Our business strategy is to maximize sustainable value by moving our product candidate portfolio through clinical development, registration and ultimately to the market. We believe this is best achieved by retaining full product rights to our product candidates within specialty markets, while relying on collaborative arrangements with third parties for product candidates within larger markets or outside our areas of expertise.

Clinical Development Projects

We currently have three pivotal clinical trials and two Phase 2 clinical trials ongoing. In addition, we have a number of potential preclinical candidates to be evaluated for clinical study.

Peramivir

We are developing intravenous, or i.v., peramivir, a neuraminidase inhibitor, for the treatment of influenza.

Phase 3 Clinical Trials

We are advancing the clinical development of i.v. peramivir under a five-year, $179.9 million contract with the United States Department of Health and Human Services, or HHS, which we entered into in January 2007. The original contract award was for $102.6 million. In September 2009 we entered into a modification to the contract that awarded us an additional $77.2 million to complete Phase 3 development of i.v. peramivir. We expect this additional award to fully fund our internal and external costs associated with our ongoing Phase 3 clinical trials for i.v. peramivir.

In September 2009 we announced the initiation of two Phase 3 clinical trials of i.v. peramivir for the treatment of hospitalized patients with serious influenza. These studies are intended to support U.S. regulatory approval of peramivir as a treatment for influenza.

One study is a multicenter, randomized, double-blind, controlled study to evaluate the efficacy and safety of i.v. peramivir administered once-daily for five days in addition to standard of care, compared to standard of care alone, in adults and adolescents who are hospitalized due to serious influenza.

The other study is an open-label, randomized study of the anti-viral activity, safety and tolerability of 600 mg of i.v. peramivir administered once-daily, compared with split doses of 300 mg administered twice-daily for

five days in adult and adolescent hospitalized patients with confirmed or suspected influenza infection.

The combined enrollment target for these studies is approximately 700 patients. We expect to complete the studies in two Northern Hemisphere flu seasons. We also expect to conduct an external control cohort study to provide additional evidence of the efficacy of i.v. peramivir.

U.S. Government Order and Emergency Use Authorization

In September 2009 we received a request for proposal, or RFP, from HHS for the supply of i.v. peramivir for the treatment of critically ill influenza patients. In October 2009, the U.S. Food and Drug Administration, or FDA, in

Table of Contents

response to a request from the U.S. Centers for Disease Control and Prevention, issued an emergency use authorization, or EUA, permitting the use of i.v. peramivir in hospitalized adult and pediatric patients with confirmed or suspected 2009 H1N1 influenza infection who have not responded to oral or inhaled antivirals or in whom oral or inhaled antiviral therapy is not feasible, and in adult patients for whom therapy with an i.v. drug is judged clinically appropriate due to other circumstances.

On November 4, 2009 HHS ordered 10,000 courses of i.v. peramivir from us for an aggregate purchase price of $22.5 million. We shipped the entire order from existing inventory to HHS on November 4, 2009. In addition, separate from the RFP process, we donated and transferred to HHS an initial supply of 1,200 courses of i.v. peramivir to allow doctors and patients near-term access to the drug. As of the date of this prospectus supplement, i.v. peramivir is the only i.v. antiviral medication ordered by the HHS that has received an EUA from the FDA.

The minimum and maximum quantities of i.v. peramivir that may be ordered by HHS under the RFP are 1,000 and 40,000 treatment courses. We also are required to maintain the ability to manufacture additional courses for treatment or prophylaxis, dependent on the volume and size of orders received from HHS. Based on the RFP, we initiated manufacture of approximately 133,000 courses of i.v. peramivir at a cost of approximately $10 million, so that we would have additional inventory available in advance of potential orders. In addition, we have sufficient quantities of the active pharmaceutical ingredient, or API, of i.v. peramivir available to produce up to 350,000 additional courses. We believe that we have the capacity for large scale commercial production, including two API production facilities and one finished drug product manufacturer, all of which are in substantial compliance with the FDA s current Good Manufacturing Practices.

Shionogi & Co., Ltd. Development of i.v. Peramivir

In February 2007 we entered into an exclusive license agreement with Shionogi & Co., Ltd., or Shionogi, to develop and commercialize peramivir in Japan and Taiwan and to perform a Phase 3 clinical trial in Hong Kong. The agreement provides for an upfront payment of $14 million and future clinical event milestone payments of up to $21 million. In July 2009 Shionogi announced positive results in two Phase 3 clinical trials of i.v. peramivir. One of these trials was conducted in patients with uncomplicated outpatient influenza and the other was for the treatment of influenza in patients with risk factors for complications. The studies were sponsored by Shionogi and conducted during the 2008-2009 influenza season. Shionogi and Green Cross Corporation, the license holder of peramivir in Korea pursuant to a June 2006 license agreement with us, co-conducted the portion of the studies in Korea. Doses of i.v. peramivir of 300 mg and 600 mg, administered in single and multiple doses were found to be generally safe and well-tolerated in these trials. Further analyses of the study data, including secondary efficacy endpoints and detailed safety, are underway. Further, Shionogi announced that it had filed its new drug application in October 2009 to seek regulatory approval for i.v. peramivir in Japan. This filing triggered a $7.0 million milestone payment to us under our license agreement with Shionogi.

Distribution Arrangements for Peramivir Outside the United States

We have entered into binding letters of intent with three parties to exclusively represent us and i.v. peramivir for influenza stockpiling opportunities, as well as for marketing and distribution of i.v. peramivir for seasonal influenza upon local regulatory approval, within specified territories outside the United States. The three parties are moksha8 Pharmaceuticals, Inc. for Brazil and Mexico, NT Pharma (Group) Co., Ltd. for China and Neopharm Group for Israel. Each of them has initiated discussions with key government officials in its respective territories to discuss peramivir s availability during the current global health emergency. We are in discussions with each of the parties regarding definitive agreements.

Forodesine HCl

Forodesine HCl is a transition-state analog inhibitor of the enzyme purine nucleoside phosphorylase, or PNP. In February 2006 we announced an exclusive licensing agreement with Mundipharma to develop and commercialize forodesine in markets across Europe, Asia and Australia for use in oncology. We have retained full development and commercialization rights to forodesine in the rest of the world, including North America.

Table of Contents

Continued Development of Oral Forodesine in Cutaneous T-Cell Lymphoma

Following the completion of a Phase 1/Phase 2 clinical trial of forodesine in patients with refractory cutaneous T-cell lymphoma, or CTCL, in October 2007 we initiated a pivotal trial with an oral formulation of forodesine for treatment of patients with CTCL. This trial is being conducted under an SPA agreement negotiated with the FDA and, if successful, will serve as a basis for a new drug application to the FDA using the oral formulation in patients with relapsed CTCL. In February 2007 we announced that the Committee for Orphan Medicinal Products of the European Medicines Agency had granted orphan drug designation to forodesine for the treatment of CTCL. In addition, the FDA has granted orphan drug designation to forodesine for the treatment of CTCL. The trial, which uses a non-randomized, open-label, single-arm design, continues to enroll subjects with CTCL stages IIB through IVA who have failed three systemic therapies. We are targeting completion of enrollment by the end of 2009 and expect to report preliminary data on this study in mid-2010.

Forodesine Trial Initiated for Chronic Lymphocytic Leukemia Patients

We have initiated a Phase 2 clinical trial that will evaluate forodesine in patients with chronic lymphocytic leukemia, or CLL. The trial is a single-arm exploratory study of single agent forodesine with response rate as the primary endpoint. The first patient was dosed during the first quarter of 2008 and the trial is ongoing. Based on an interim analysis of data from an exploratory Phase 2 single-arm, open-label program in patients with CLL who failed previous treatment and pharmacokinetic and pharmacodynamic study results from healthy patients, the dosing regimen in the ongoing Phase 2 CLL study was amended to evaluate 200 mg forodesine twice-daily. We expect to provide an update on this study by the end of 2009.

BCX-4208

BCX-4208 is a next-generation PNP inhibitor in clinical development. We have initiated a Phase 2 clinical trial of BCX-4208 for the treatment of gout, which is caused by elevated levels of uric acid in blood. We believe that BCX-4208 is a good candidate to control gout because data from a prior Phase 2 clinical trial of BCX-4208 for psoriasis indicated a dose related reduction in uric acid that was sustained for the duration of drug exposure. Our gout clinical trial is a Phase 2, randomized, double-blind, placebo-controlled study to evaluate the efficacy and safety of BCX-4208 in subjects with gout. The trial contains two parts: Part 1 will study multiple doses of BCX-4208 against a placebo and Part 2 will study dose escalation. The trial s primary objective is to determine the effect of different doses of orally administered BCX-4208 on serum uric acid levels in patients with gout. The trial is expected to enroll up to 120 subjects and we expect to have initial data from Part 1 in mid-2010.

Preclinical Development Activities

Our discovery engine has been the primary source of our clinical pipeline and has also produced pre-clinical candidates. While we have focused extensively during the last two years on advancing our late stage clinical development projects, we believe that given our clinical progress to date and our current financial position, we are able to invest in developing our early clinical pipeline. In addition to our clinical programs, we also retain exclusive worldwide rights to potent inhibitors in various therapeutic areas and we are in the process of evaluating which are the most attractive. We have a disciplined approach to drug discovery and will continue to evaluate and test promising compounds to determine which should be taken into clinical testing.

Alliances

As part of our strategy, we expect to consider potential third-party alliances in large primary care markets and in areas where do not have the resources or expertise to advance the development of product candidates on our own. These

alliances could include preclinical development, clinical development, regulatory approval or marketing, sales and distribution of our product candidates.

In addition to our collaborative relationship with Shionogi and the letters of intent we have entered into for peramivir outside the United States, we have established collaborative relationships with Mundipharma International Holdings Limited for the development and commercialization of forodesine in Europe, Asia and Australia and with Green Cross Corporation for the development and commercialization of peramivir in Korea.

Table of Contents

Risk Factors

Our success is dependent on our ability to successfully develop our compounds, complete clinical trials and commercialize our products. Because none of our products have been approved by regulatory authorities, we may not be able to generate significant revenue or attain profitability. Furthermore, we are dependent on collaborative relationships and the expertise of third parties for drug development, commercialization and manufacturing. The process of establishing and implementing collaborative relationships is difficult, time-consuming and involves significant uncertainty. See Risk Factors beginning on page S-7 for a full discussion of these and other risks relating to our business and owning shares of our common stock.

We are a Delaware corporation originally founded in 1986. Our principal executive offices are located at 2190 Parkway Lake Drive, Birmingham, Alabama 35244, and our telephone number is (205) 444-4600. Our web site is located at http://www.biocryst.com. The information on our web site is not incorporated by reference into this prospectus supplement.

Table of Contents

THE OFFERING

Common stock offered	5,000,000 shares
Common stock to be outstanding after the offering	43,833,408 shares
Over-allotment option	750,000 shares
Use of proceeds	We intend to use the net proceeds of this offering for general corporate purposes, including funding our research and development efforts, clinical development of forodesine and BCX-4208 and pre-commercialization activities relating to i.v. peramivir and forodesine. See Use of Proceeds.
Nasdaq Global Market symbol	BCRX
Risk Factors	See Risk Factors beginning on page S-7 and the other information included in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus for a discussion of certain factors you should carefully consider before deciding to invest in shares of our common stock.

The number of shares to be outstanding after this offering is based on 38,883,408 shares outstanding as of November 9, 2009 and excludes:

- 3,159,895 shares of common stock issuable upon the exercise of warrants at an exercise price of $10.25 per share; and
- 6,166,573 shares of common stock issuable upon the exercise of stock options outstanding under our stock option plans at a weighted average exercise price of $7.07 per share and 1,509,822 additional shares of common stock reserved for issuance under our stock option plan.

Except as otherwise noted, all information in this prospectus supplement assumes the underwriters do not exercise their over-allotment option.

Table of Contents

SUMMARY FINANCIAL DATA

The following summary financial information for the five years ended December 31, 2008 is derived from our audited financial statements. The following summary financial information as of September 30, 2009 and for the nine months ended September 30, 2009 and 2008 is derived from our unaudited financial statements. The unaudited financial statements have been prepared on the same basis as the audited financial statements and, in the opinion of management, include all adjustments, consisting only of normal recurring adjustments, considered necessary for a fair presentation of our financial condition and results of operations for such periods. The data should be read in conjunction with the financial statements, related notes, management s discussion and analysis of financial condition and results of operations, and other financial information incorporated by reference into this prospectus supplement. These historical results are not necessarily indicative of the results to be expected in the future. Interim results are not necessarily indicative of the results that may be expected for an entire year.

	Nine Months Ended September 30,		Year Ended December 31,				
	2009	2008	2008	2007	2006	2005	2004
	(in thousands, except per share data)						
Statement of Operations Data:							
Total revenues	$ 19,694	$ 22,321	$ 56,561	$ 71,238	$ 6,212	$ 152	$ 337
Research and development expenses	40,683	51,267	73,327	94,052	47,083	23,642	18,868
Net loss	(28,603)	(34,802)	(24,732)	(29,055)	(43,618)	(26,099)	(21,104)
Amounts per common share:							
Basic and diluted net loss per share	(0.75)	(0.91)	(0.65)	(0.89)	(1.50)	(1.01)	(1.00)
Weighted average shares outstanding	38,300	38,040	38,062	32,711	29,147	25,721	21,165

	As of September 30, 2009	
	Actual	As Adjusted
	(unaudited) (in thousands)	
Balance Sheet Data:		
Cash, cash equivalents and marketable securities	$ 38,492	$ 84,136
Total assets	60,588	106,232
Long-term deferred revenue	19,065	19,065
Accumulated deficit	(277,871)	(277,871)
Total stockholders equity	23,545	69,189

The preceding table summarizes our balance sheet data as of September 30, 2009:

on an actual basis; and

as adjusted to reflect our sale of the 5,000,000 shares of common stock offered by us at the public offering price of $9.75 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

Table of Contents

RISK FACTORS

An investment in our common stock involves risks. You should consider carefully all of the information that is included or incorporated by reference in this prospectus supplement and the accompanying prospectus before investing in our common stock. In particular, you should evaluate the uncertainties and risks referred to or described below, which may adversely affect our business, financial condition or results of operations. Additional uncertainties and risks that are not presently known to us or that we currently deem immaterial may also adversely affect our business, financial condition or results of operations.

Risks Relating to Our Business

We have incurred substantial losses since our inception in 1986, expect to continue to incur such losses, and may never be profitable.

Since our inception in 1986, we have not been profitable. We expect to incur additional losses for the foreseeable future, and our losses could increase as our research and development efforts progress. To become profitable, we must successfully manufacture and develop drug product candidates, receive regulatory approval, and successfully commercialize or enter into profitable agreements with other parties. It could be several years, if ever, before we receive royalties from any current or future license agreements or revenues directly from product sales.

Because of the numerous risks and uncertainties associated with developing our product candidates and their potential for commercialization, we are unable to predict the extent of any future losses. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. If we are unable to achieve and sustain profitability, the market value of our common stock will likely decline.

Our success depends upon our ability to advance our products through the various stages of development, especially through the clinical trial process.

To receive the regulatory approvals necessary for the sale of our product candidates, we or our partners must demonstrate through preclinical studies and clinical trials that each product candidate is safe and effective. The clinical trial process is complex and uncertain. Because of the cost and duration of clinical trials, we may decide to discontinue development of product candidates that are unlikely to show good results in the trials, unlikely to help advance a product to the point of a meaningful collaboration, or unlikely to have a reasonable commercial potential. We may suffer significant setbacks in pivotal clinical trials, even after earlier clinical trials show promising results. Clinical trials may not be adequately designed or executed, which could affect the potential outcome and analysis of study results. Any of our product candidates may produce undesirable side effects in humans. These side effects could cause us or regulatory authorities to interrupt, delay or halt clinical trials of a product candidate. These side effects could also result in the FDA or foreign regulatory authorities refusing to approve the product candidate for any targeted indications. We, our partners, the FDA or foreign regulatory authorities may suspend or terminate clinical trials at any time if we or they believe the trial participants face unacceptable health risks. Clinical trials may fail to demonstrate that our product candidates are safe or effective and have acceptable commercial viability.

Our ability to successfully complete clinical trials is dependent upon many factors, including but not limited to:

- our ability to find suitable clinical sites and investigators to enroll patients;
- the availability of and willingness of patients to participate in our clinical trials;

difficulty in maintaining contact with patients to provide complete data after treatment;

our product candidates may not prove to be either safe or effective;

clinical protocols or study procedures may not be adequately designed or followed by the investigators;

manufacturing or quality control problems could affect the supply of drug product for our trials; and

delays or changes in requirements by governmental agencies.

Table of Contents

Clinical trials are lengthy and expensive. We or our partners incur substantial expense for, and devote significant time to, preclinical testing and clinical trials, yet cannot be certain that the tests and trials will ever result in the commercial sale of a product. For example, clinical trials require adequate supplies of drug and sufficient patient enrollment. Delays in patient enrollment can result in increased costs and longer development times. Even if we or our partners successfully complete clinical trials for our product candidates, we or our partners might not file the required regulatory submissions in a timely manner and may not receive regulatory approval for the product candidate.

Our clinical trials may not adequately show that our drugs are safe or effective.

Progression of our drug products through the clinical development process is dependent upon our trials indicating our drugs have adequate safety profiles and show positive therapeutic effects in the patients being treated by achieving pre-determined endpoints according to the trial protocols. Failure to achieve either of these could result in delays in our trials or even require the performance of additional unplanned trials. This could result in delays in the development of our product candidates and could result in significant unexpected costs.

If we fail to obtain additional financing, we may be unable to complete the development and commercialization of our product candidates or continue our research and development programs.

As our clinical programs continue to grow and patient enrollment increases, our costs will increase. Our current and planned clinical trials plus the related development, manufacturing, regulatory approval process requirements, and additional personnel resources and testing required for supporting the development of our product candidates will consume significant capital resources. Our expenses, revenues and burn rate could vary significantly depending on many factors, including our ability to raise additional capital, the development progress of our collaborative agreements for our product candidates, the amount of funding we receive from HHS for peramivir, the amount of funding or assistance, if any, we receive from other governmental agencies or other new partnerships with third parties for the development of our product candidates, the amount or profitability of any orders for peramivir by any government agency or other party, the progress and results of our current and proposed clinical trials for our most advanced drug products, the progress made in the manufacturing of our lead products and the progression of our other programs.

We expect that we will be required to raise additional capital to complete the development and commercialization of our current product candidates and we may seek to raise capital at any time we deem market conditions to be favorable. Additional funding, whether through additional sales of securities or collaborative or other arrangements with corporate partners or from other sources, including governmental agencies, in general and from any HHS contract specifically, may not be available when needed or on terms acceptable to us. The issuance of preferred or common stock or convertible securities, with terms and prices significantly more favorable than those of the currently outstanding common stock, could have the effect of diluting or adversely affecting the holdings or rights of our existing stockholders. In addition, collaborative arrangements may require us to transfer certain material rights to such corporate partners. Insufficient funds may require us to delay, scale-back or eliminate certain of our research and development programs.

If HHS were to eliminate, reduce or delay funding from our contract, or dispute some of our incurred costs or other actions taken under the contract, this would have a significant negative impact on our revenues, cash flows and the development of peramivir.

Our projections of revenues and incoming cash flows are substantially dependent upon HHS reimbursement for the costs related to our peramivir program. If HHS were to eliminate, reduce or delay the funding for this program or disallow some of our incurred costs, we would have to obtain additional funding for development of this drug

candidate or significantly reduce or stop the development effort. Further, HHS may challenge actions that we have taken or may take under our contract, which could negatively impact our operating results and cash flows.

In contracting with HHS, we are subject to various U.S. government contract requirements, including general clauses for a cost-reimbursement research and development contract, which may limit our reimbursement or if we are found to be in violation could result in contract termination. U.S. government contracts typically contain

Table of Contents

extraordinary provisions which would not typically be found in commercial contracts. For instance, government contracts permit unilateral modification by the government, interpretation of relevant regulations (i.e., federal acquisition regulation clauses), and the ability to terminate without cause. As such, the company may be at a disadvantage as compared to other commercial contracts. In addition, U.S. government contracts are subject to audit and modification by the government at its sole discretion. If the government terminates its contract with us for its convenience or if we default by failing to perform in accordance with the contract schedule and terms, significant negative impact on our cash flows and operations could result.

Our contract with HHS has special contracting requirements, which create additional risks of reduction or loss of funding.

We have entered into a contract with HHS for the advanced development of our neuraminidase inhibitor, peramivir. In contracting with HHS, we are subject to various U.S. government contract requirements, including general clauses for a cost-reimbursement research and development contract. U.S. government contracts typically contain unfavorable termination provisions and are subject to audit and modification by the government at its sole discretion, which subjects us to additional risks. These risks include the ability of the U.S. government to unilaterally:

terminate or reduce the scope of our contract; and

audit and object to our contract-related costs and fees, including allocated indirect costs.

The U.S. government may terminate its contract with us either for its convenience or if we default by failing to perform in accordance with the contract schedule and terms. Termination for convenience provisions generally enable us to recover only our costs incurred or committed, and settlement expenses and profit on the work completed prior to termination. Termination for default provisions does not permit these recoveries.

As a U.S. government contractor, we are required to comply with applicable laws, regulations and standards relating to our accounting practices and are subject to periodic audits and reviews. As part of any such audit or review, the U.S. government may review the adequacy of, and our compliance with, our internal control systems and policies, including those relating to our purchasing, property, estimating, compensation and management information systems. Based on the results of its audits, the U.S. government may adjust our contract-related costs and fees, including allocated indirect costs. In addition, if an audit or review uncovers any improper or illegal activity, we may be subject to civil and criminal penalties and administrative sanctions, including termination of our contracts, forfeiture of profits, suspension of payments, fines and suspension or prohibition from doing business with the U.S. government. We could also suffer serious harm to our reputation if allegations of impropriety were made against us. In addition, under U.S. government purchasing regulations, some of our costs may not be reimbursable or allowed under our contracts. Further, as a U.S. government contractor, we are subject to an increased risk of investigations, criminal prosecution, civil fraud, whistleblower lawsuits and other legal actions and liabilities as compared to private sector commercial companies.

If we fail to successfully commercialize or establish collaborative relationships to commercialize certain of our drug product candidates or if any partner terminates or fails to perform its obligations under agreements with us, potential revenues from commercialization of our product candidates could be reduced, delayed or eliminated.

Our business strategy is to increase the asset value of our drug candidate portfolio. We believe this is best achieved by retaining full product rights or through collaborative arrangements with third parties as appropriate. As needed, potential third-party alliances could include preclinical development, clinical development, regulatory approval, marketing, sales and distribution of our drug product candidates.

Currently, we have established collaborative relationships with Mundipharma for the development and commercialization of forodesine and with each of Shionogi and Green Cross for the development and

Table of Contents

commercialization of peramivir. The process of establishing and implementing collaborative relationships is difficult, time-consuming and involves significant uncertainty, including:

- our partners may seek to renegotiate or terminate their relationships with us due to unsatisfactory clinical results, a change in business strategy, a change of control or other reasons;
- our contracts for collaborative arrangements may expire;
- our partners may choose to pursue alternative technologies, including those of our competitors;
- we may have disputes with a partner that could lead to litigation or arbitration;
- we do not have day to day control over the activities of our partners and have limited control over their decisions;
- our ability to generate future event payments and royalties from our partners depends upon their abilities to establish the safety and efficacy of our product candidates, obtain regulatory approvals and achieve market acceptance of products developed from our product candidates;
- we or our partners may fail to properly initiate, maintain or defend our intellectual property rights, where applicable, or a party may utilize our proprietary information in such a way as to invite litigation that could jeopardize or potentially invalidate our proprietary information or expose us to potential liability;
- our partners may not devote sufficient capital or resources towards our product candidates; and
- our partners may not comply with applicable government regulatory requirements.

If any partner fails to fulfill its responsibilities in a timely manner, or at all, our commercialization efforts related to that collaboration could be reduced, delayed or terminated, or it may be necessary for us to assume responsibility for activities that would otherwise have been the responsibility of our partner. If we are unable to establish and maintain collaborative relationships on acceptable terms, we may have to delay or discontinue further development of one or more of our product candidates, undertake commercialization activities at our own expense or find alternative sources of funding. Any delay in the development or commercialization of our compounds would severely affect our business, because if our compounds do not progress through the development process or reach the market in a timely manner, or at all, we may not receive additional future event payments and may never receive product or royalty payments.

We have not commercialized any products or technologies and our future revenue generation is uncertain.

We have not commercialized any products or technologies, and we may never be able to do so. We currently have no marketing capability and no direct or third-party sales or distribution capabilities and may be unable to establish these capabilities for products we plan to commercialize. In addition, our revenue from collaborative agreements is dependent upon the status of our preclinical and clinical programs. If we fail to advance these programs to the point of being able to enter into successful collaborations, we will not receive any future event or other collaborative payments.

Our ability to receive revenue from products we commercialize presents several risks, including:

- we or our collaborators may fail to successfully complete clinical trials sufficient to obtain FDA marketing approval;

many competitors are more experienced and have significantly more resources and their products could be more cost effective or have a better efficacy or tolerability profile than our product candidates;

we may fail to employ a comprehensive and effective intellectual property strategy which could result in decreased commercial value of our company and our products;

we may fail to employ a comprehensive and effective regulatory strategy which could result in a delay or failure in commercialization of our products;

Table of Contents

our ability to successfully commercialize our products are affected by the competitive landscape, which cannot be fully known at this time;

reimbursement is constantly changing which could greatly affect usage of our products; and

any future revenue directly from product sales would depend on our ability to successfully complete clinical studies, obtain regulatory approvals, manufacture, market and commercialize any approved drugs.

If our development collaborations with third parties, such as our development partners and contract research organizations, fail, the development of our drug product candidates will be delayed or stopped.

We rely heavily upon other parties for many important stages of our drug development programs, including but not limited to:

discovery of compounds that cause or enable biological reactions necessary for the progression of the disease or disorder, called enzyme targets;

licensing or design of enzyme inhibitors for development as drug product candidates;

execution of some preclinical studies and late-stage development for our compounds and product candidates;

management of our clinical trials, including medical monitoring and data management;

execution of additional toxicology studies that may be required to obtain approval for our product candidates; and

manufacturing the starting materials and drug substance required to formulate our drug products and the drug products to be used in both our clinical trials and toxicology studies.

Our failure to engage in successful collaborations at any one of these stages would greatly impact our business. If we do not license enzyme targets or inhibitors from academic institutions or from other biotechnology companies on acceptable terms, our product development efforts would suffer. Similarly, if the contract research organizations that conduct our initial or late-stage clinical trials, conduct our toxicology studies, manufacture our starting materials, drug substance and drug products or manage our regulatory function breached their obligations to us or perform their services inconsistent with industry standards and not in accordance with the required regulations, this would delay or prevent the development of our product candidates.

If we lose our relationship with any one or more of these parties, we could experience a significant delay in both identifying another comparable provider and then contracting for its services. We may be unable to retain an alternative provider on reasonable terms, if at all. Even if we locate an alternative provider, it is likely that this provider may need additional time to respond to our needs and may not provide the same type or level of service as the original provider. In addition, any provider that we retain will be subject to applicable FDA current Good Laboratory Practices, or cGLP, current Good Manufacturing Practices, or cGMP and current Good Clinical Practices, or cGCP, and comparable foreign standards. We do not have control over compliance with these regulations by these providers. Consequently, if these practices and standards are not adhered to by these providers, the development and commercialization of our product candidates could be delayed., and our business, financial condition and results of operations could be materially adversely affected.

Table of Contents

Our development of peramivir for influenza is subject to all disclosed drug development and potential commercialization risks and numerous additional risks. Any potential revenue benefits to us are highly speculative.

Further development and potential commercialization of peramivir is subject to all the risks and uncertainties disclosed in our other risk factors relating to drug development and commercialization. In addition, potential commercialization of peramivir is subject to further risks, including but not limited to the following:

- the injectable versions of peramivir are currently in clinical development and have been tested in a limited number of humans and may not be safe or effective;
- necessary government or other third-party funding and clinical testing for further development of peramivir may not be available timely, at all, or in sufficient amounts;
- the flu prevention or pandemic treatment concerns may not materialize at all, or in the near future;
- advances in flu vaccines could substantially replace potential demand for an antiviral such as peramivir;
- any substantial demand for pandemic or seasonal flu treatments may occur before peramivir can be adequately developed and tested in clinical trials;
- injectable forms of peramivir may not prove to be accepted by patients and physicians as a treatment for seasonal influenza compared to the other currently marketed antiviral drugs, which would limit revenue from non-governmental entities;
- numerous large and well-established pharmaceutical and biotech companies will be competing to meet the market demand for flu drugs and vaccines;
- the only major markets in which patents relating to peramivir have issued or been allowed are the United States, Canada, Japan, Australia and many contracting and extension states of the European Union, while no patent applications or issued patents for peramivir exist in other potentially significant markets;
- regulatory authorities may not make needed accommodations to accelerate the drug testing and approval process for peramivir; and
- in the next few years, it is expected that a limited number of governmental entities will be the primary potential customers for peramivir and if we are not successful at marketing peramivir to these entities for any reason, we will not receive substantial revenues from stockpiling orders from these entities.

If any or all of these and other risk factors occur, we will not attain significant revenues or gross margins from peramivir and our stock price will be adversely affected.

There are risks related to the potential emergency use or sale of peramivir.

To the extent that peramivir is used as a treatment for H1N1 flu (or other strains of flu), there can be no assurance that it will prove to be generally safe, well tolerated and effective. Emergency use of peramivir may create certain liabilities for the company. There is no assurance that we or our manufacturers will be able to fully meet the demand for peramivir in the event of additional orders. Further, we may not achieve a favorable price for additional orders of peramivir in the U.S. or in any other country. Our competitors may develop products that could compete with or replace peramivir. We may face competition in markets where we have no existing intellectual property protection or

are unable to successfully enforce our intellectual property rights.

There is no assurance that the non-U.S. partnerships that we have entered into for peramivir will result in any order for peramivir in those countries. There is no assurance that peramivir will be approved for emergency use or will achieve market approval in those countries. In the event that any emergency use is granted, there is no assurance that any order by any non-U.S. partnership will be substantial or will be profitable to the company. The sale of peramivir, emergency use or other use of peramivir in any country may create certain liabilities for the company.

Table of Contents

Because we have limited manufacturing experience, we depend on third-party manufacturers to manufacture our drug product candidates and the materials for our product candidates. If we cannot rely on third-party manufacturers, we will be required to incur significant costs and potential delays in finding new third-party manufacturers.

We have limited manufacturing experience and only a small scale manufacturing facility. We currently rely upon third-party manufacturers to manufacture the materials required for our drug product candidates and most of the preclinical and clinical quantities of our product candidates. We depend on these third-party manufacturers to perform their obligations in a timely manner and in accordance with applicable governmental regulations. Our third-party manufacturers may encounter difficulties with meeting our requirements, including but not limited to problems involving:

- inconsistent production yields;
- product liability claims;
- difficulties in scaling production to commercial and validation sizes;
- interruption of the delivery of materials required for the manufacturing process;
- scheduling of plant time with other vendors or unexpected equipment failure;
- potential catastrophes that could strike their facilities;
- potential impurities in our drug substance or drug products that could affect availability of product for our clinical trials or future commercialization;
- poor quality control and assurance or inadequate process controls; and
- lack of compliance with regulations and specifications set forth by the FDA or other foreign regulatory agencies.

These contract manufacturers may not be able to manufacture the materials required or our drug product candidates at a cost or in quantities necessary to make them commercially viable. We also have no control over whether third-party manufacturers breach their agreements with us or whether they may terminate or decline to renew agreements with us. To date, our third-party manufacturers have met our manufacturing requirements, but they may not continue to do so. Furthermore, changes in the manufacturing process or procedure, including a change in the location where the drug is manufactured or a change of a third-party manufacturer, may require prior review and approval in accordance with the FDA s cGMPs and comparable foreign requirements. This review may be costly and time-consuming and could delay or prevent the launch of a product. The FDA or similar foreign regulatory agencies at any time may also implement new standards, or change their interpretation and enforcement of existing standards for manufacture, packaging or testing of products. If we or our contract manufacturers are unable to comply, we or they may be subject to regulatory action, civil actions or penalties.

If we are unable to enter into agreements with additional manufacturers on commercially reasonable terms, or if there is poor manufacturing performance on the part of our third-party manufacturers, we may not be able to complete development of, or market, our product candidates.

Our raw materials, drug substances, and drug products are manufactured by a limited group of suppliers and some at a single facility. If any of these suppliers were unable to produce these items, this could significantly impact our supply of drugs for further preclinical testing and clinical trials.

If we or our partners do not obtain and maintain governmental approvals for our products under development, we or our partners will not be able to sell these potential products, which would significantly harm our business because we will receive no revenue.

We or our partners must obtain regulatory approval before marketing or selling our future drug products. If we or our partners are unable to receive regulatory approval and do not market or sell our future drug products, we will never receive any revenue from such product sales. In the United States, we or our partners must obtain FDA approval for each drug that we intend to commercialize. The process of preparing for and obtaining FDA approval

Table of Contents

may be lengthy and expensive, and approval is never certain. Products distributed abroad are also subject to foreign government regulation and export laws of the U.S. Neither the FDA nor foreign regulatory agencies have approved any of our drug product candidates. Because of the risks and uncertainties in biopharmaceutical development, our product candidates could take a significantly longer time to gain regulatory approval than we expect or may never gain approval. If the FDA delays regulatory approval of our product candidates, our management s credibility, our company s value and our operating results may suffer. Even if the FDA or foreign regulatory agencies approve a product candidate, the approval may limit the indicated uses for a product candidate and/or may require post-marketing studies.

The FDA regulates, among other things, the record keeping and storage of data pertaining to potential pharmaceutical products. We currently store most of our preclinical research data, our clinical data and our manufacturing data at our facility. While we do store duplicate copies of most of our clinical data offsite and a significant portion of our data is included in regular backups of our systems, we could lose important data if our facility incurs damage. If we get approval to market our potential products, whether in the United States or internationally, we will continue to be subject to extensive regulatory requirements. These requirements are wide ranging and govern, among other things:

- adverse drug experience reporting regulations;
- product promotion;
- product manufacturing, including good manufacturing practice requirements; and
- product changes or modifications.

Our failure to comply with existing or future regulatory requirements, or our loss of, or changes to, previously obtained approvals, could have a material adverse effect on our business because we will not receive product or royalty revenues if we or our partners do not receive approval of our products for marketing.

In June 1995, we notified the FDA that we submitted incorrect data for our Phase 2 studies of BCX-34 applied to the skin for CTCL and psoriasis. In November 1995, the FDA issued a List of Inspectional Observations, Form FDA 483, which cited our failure to follow good clinical practices. The FDA also inspected us in June 1996. The focus was on the two 1995 Phase 2 dose-ranging studies of topical BCX-34 for the treatment of CTCL and psoriasis. As a result of the investigation, the FDA issued us a Form FDA 483, which cited our failure to follow good clinical practices. We are no longer developing BCX-34; however, as a consequence of these two investigations, our ongoing and future clinical studies may receive increased scrutiny, which may delay the regulatory review process.

We face intense competition, and if we are unable to compete effectively, the demand for our products, if any, may be reduced.

The biotechnology and pharmaceutical industries are highly competitive and subject to rapid and substantial technological change. We face, and will continue to face, competition in the licensing of desirable disease targets, licensing of desirable drug product candidates, and development and marketing of our product candidates from academic institutions, government agencies, research institutions and biotechnology and pharmaceutical companies. Competition may also arise from, among other things:

- other drug development technologies;
- methods of preventing or reducing the incidence of disease, including vaccines; and

new small molecule or other classes of therapeutic agents.

Developments by others may render our product candidates or technologies obsolete or noncompetitive.

We and our partners are performing research on or developing products for the treatment of several disorders including T-cell mediated disorders (T-cell cancers and other autoimmune indications), gout, CTCL, CLL, influenza, and hepatitis C. We expect to encounter significant competition for any of the pharmaceutical products we plan to develop. Companies that complete clinical trials, obtain required regulatory approvals and commence commercial sales of their products before their competitors may achieve a significant competitive advantage. Such

Table of Contents

is the case with Eisai s Targretin for CTCL and the current neuraminidase inhibitors marketed by Glaxo Smith Kline and Roche for influenza. With respect to the neuraminidase inhibitors, these companies may develop i.v. formulations that could compete with peramivir. Further, several pharmaceutical and biotechnology firms, including major pharmaceutical companies and specialized structure-based drug design companies, have announced efforts in the field of structure-based drug design and in the fields of PNP, influenza, hepatitis C, and in other therapeutic areas where we have discovery efforts ongoing. If one or more of our competitors products or programs are successful, the market for our products may be reduced or eliminated.

Compared to us, many of our competitors and potential competitors have substantially greater:

- capital resources;
- research and development resources, including personnel and technology;
- regulatory experience;
- preclinical study and clinical testing experience;
- manufacturing and marketing experience; and
- production facilities.

Any of these competitive factors could reduce demand for our products.

If we fail to adequately protect or enforce our intellectual property rights or secure rights to patents of others, the value of those rights would diminish.

Our success will depend in part on our ability and the abilities of our partners to obtain, protect and enforce viable intellectual property rights including but not limited to trade name, trade mark and patent protection for our company and its products, methods, processes and other technologies we may license or develop, to preserve our trade secrets, and to operate without infringing the proprietary rights of third parties both domestically and abroad. The patent position of biotechnology and pharmaceutical companies is generally highly uncertain, involves complex legal and factual questions and has recently been the subject of much litigation. Neither the United States Patent and Trademark Office, or USPTO, the Patent Cooperation Treaty offices, nor the courts of the United States and other jurisdictions have consistent policies nor predictable rulings regarding the breadth of claims allowed or the degree of protection afforded under many biotechnology and pharmaceutical patents. Further, we do not have worldwide patent protection for our product candidates and our intellectual property rights may not be legally protected or enforceable in all countries throughout the world. The validity, scope, enforceability and commercial value of these rights, therefore, is highly uncertain.

Our success depends in part on avoiding the infringement of other parties patents and other intellectual property rights as well as avoiding the breach of any licenses relating to our technologies and products. In the U.S., patent applications filed in recent years are confidential for 18 months, while older applications are not published until the patent issues. As a result, avoiding patent infringement may be difficult and we may inadvertently infringe third-party patents or proprietary rights. These third parties could bring claims against us, our partners or our licensors that even if resolved in our favor, could cause us to incur substantial expenses and, if resolved against us, could additionally cause us to pay substantial damages. Further, if a patent infringement suit were brought against us, our partners or our licensors, we or they could be forced to stop or delay research, development, manufacturing or sales of any infringing product in the country or countries covered by the patent we infringe, unless we can obtain a license from the patent

holder. Such a license may not be available on acceptable terms, or at all, particularly if the third party is developing or marketing a product competitive with the infringing product. Even if we, our partners or our licensors were able to obtain a license, the rights may be nonexclusive, which would give our competitors access to the same intellectual property.

If we or our partners are unable or fail to adequately initiate, protect, defend or enforce our intellectual property rights in any area of commercial interest or in any part of the world where we wish to seek regulatory approval for our products, methods, processes and other technologies, the value of the drug product candidates to produce revenue would diminish. Additionally, if our products, methods, processes, and other technologies or our

Table of Contents

commercial use of such products, processes, and other technologies, including but not limited to any trade name, trademark or commercial strategy infringe the proprietary rights of other parties, we could incur substantial costs. The USPTO and the patent offices of other jurisdictions have issued to us a number of patents for our various inventions and we have in-licensed several patents from various institutions. We have filed additional patent applications and provisional patent applications with the USPTO. We have filed a number of corresponding foreign patent applications and intend to file additional foreign and U.S. patent applications, as appropriate. We have also filed certain trademark and trade name applications worldwide. We cannot assure you as to:

- the degree and range of protection any patents will afford against competitors with similar products;
- if and when patents will issue;
- if patents do issue we can not be sure that we will be able to adequately defend such patents and whether or not we will be able to adequately enforce such patents; or
- whether or not others will obtain patents claiming aspects similar to those covered by our patent applications.

If the USPTO or other foreign patent office upholds patents issued to others or if the USPTO grants patent applications filed by others, we may have to:

- obtain licenses or redesign our products or processes to avoid infringement;
- stop using the subject matter claimed in those patents; or
- pay damages.

We may initiate, or others may bring against us, litigation or administrative proceedings related to intellectual property rights, including proceedings before the USPTO or other foreign patent office. Any judgment adverse to us in any litigation or other proceeding arising in connection with a patent or patent application could materially and adversely affect our business, financial condition and results of operations. In addition, the costs of any such proceeding may be substantial whether or not we are successful.

Our success is also dependent upon the skills, knowledge and experience, none of which is patentable, of our scientific and technical personnel. To help protect our rights, we require all employees, consultants, advisors and partners to enter into confidentiality agreements that prohibit the disclosure of confidential information to anyone outside of our company and require disclosure and assignment to us of their ideas, developments, discoveries and inventions. These agreements may not provide adequate protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information, and if any of our proprietary information is disclosed, our business will suffer because our revenues depend upon our ability to license or commercialize our product candidates and any such events would significantly impair the value of such product candidates.

There is a substantial risk of product liability claims in our business. If we are unable to obtain sufficient insurance, a product liability claim against us could adversely affect our business.

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face even greater risks upon any commercialization by us of our product candidates. We have product liability insurance covering our clinical trials in the amount of approximately $11.0 million. Clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to obtain sufficient insurance or

increase our existing coverage at a reasonable cost to protect us against losses that could have a material adverse effect on our business. An individual may bring a product liability claim against us if one of our products or product candidates causes, or is claimed to have caused, an injury or is found to be unsuitable for consumer use. Any product liability claim brought against us, with or without merit, could result in:

- liabilities that substantially exceed our product liability insurance, which we would then be required to pay from other sources, if available;

- an increase of our product liability insurance rates or the inability to maintain insurance coverage in the future on acceptable terms, or at all;

Table of Contents

withdrawal of clinical trial volunteers or patients;

damage to our reputation and the reputation of our products, resulting in lower sales;

regulatory investigations that could require costly recalls or product modifications;

litigation costs; and

the diversion of management s attention from managing our business.

If our facility incurs damage or power is lost for a significant length of time, our business will suffer.

We currently store numerous clinical and stability samples at our facility that could be damaged if our facility incurred physical damage or in the event of an extended power failure. We have backup power systems in addition to backup generators to maintain power to all critical functions, but any loss of these samples could result in significant delays in our drug development process.

In addition, we currently store most of our preclinical and clinical data at our facility. Duplicate copies of most critical data are stored off-site in a bank vault. Any significant degradation or failure of our computer systems could cause us to inaccurately calculate or lose our data. Loss of data could result in significant delays in our drug development process and any system failure could harm our business and operations.

If we fail to retain our existing key personnel or fail to attract and retain additional key personnel, the development of our drug product candidates and the expansion of our business will be delayed or stopped.

We are highly dependent upon our senior management and scientific team, the unexpected loss of whose services might impede the achievement of our development and commercial objectives. Competition for key personnel with the experience that we require is intense and is expected to continue to increase. Our inability to attract and retain the required number of skilled and experienced management, operational and scientific personnel, will harm our business because we rely upon these personnel for many critical functions of our business.

If, because of our use of hazardous materials, we violate any environmental controls or regulations that apply to such materials, we may incur substantial costs and expenses in our remediation efforts.

Our research and development involves the controlled use of hazardous materials, chemicals and various radioactive compounds. We are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and some waste products. Accidental contamination or injury from these materials could occur. In the event of an accident, we could be liable for any damages that result and any liabilities could exceed our resources. Compliance with environmental laws and regulations could require us to incur substantial unexpected costs, which would materially and adversely affect our results of operations.

Risks Relating to Investing in Our Common Stock

Our stock price is likely to be highly volatile and the value of your investment could decline significantly.

The market prices for securities of biotechnology companies in general have been highly volatile and may continue to be highly volatile in the future. Moreover, our stock price has fluctuated frequently, and these fluctuations are often not related to our financial results. For the twelve months ended September 30, 2009, the 52-week range of the market

price of our stock was from $0.85 to $13.47 per share. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock:

announcements of technological innovations or new products by us or our competitors;

developments or disputes concerning patents or proprietary rights;

additional dilution through sales of our common stock or other derivative securities;

status of new or existing licensing or collaborative agreements and government contracts;

Table of Contents

announcements relating to the status of our programs;

we or our partners achieving or failing to achieve development milestones;

publicity regarding actual or potential medical results relating to products under development by us or our competitors;

publicity regarding certain public health concerns for which we are or may be developing treatments;

regulatory developments in both the United States and foreign countries;

public concern as to the safety of pharmaceutical products;

actual or anticipated fluctuations in our operating results;

changes in financial estimates or recommendations by securities analysts;

changes in the structure of healthcare payment systems, including developments in price control legislation;

announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;

additions or departures of key personnel or members of our board of directors;

purchases or sales of substantial amounts of our stock by existing stockholders, including officers or directors;

economic and other external factors or other disasters or crises; and

period-to-period fluctuations in our financial results.

Because our stock ownership is concentrated, you and other investors will have limited influence on stockholder decisions. In addition, substantial sales of shares may impact the market price of our common stock.

As of September 30, 2009, our directors, executive officers and our stockholders who hold 5% or greater of our outstanding common stock, beneficially owned a significant portion of our outstanding common stock and common stock equivalents. As a result, these holders will likely be able to significantly influence our operations and matters requiring stockholder approval, including the election of directors. The interests of these stockholders may be different from the interests of other stockholders and they could take actions that might not be considered by other stockholders to be in their best interests. This concentration of ownership may delay, defer or prevent a change in our control.

In addition, if any of these significant stockholders sell substantial amounts of our common stock, the market price of our common stock may decline. These sales also might make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we consider appropriate. We are unable to predict when or if any of these stockholders may choose to sell their shares, nor can we predict the effect that sales may have on the then prevailing market price of our common stock.

We, our directors and executive officers and our significant stockholders affiliated with our directors have entered into 45-day lock-up agreements with the underwriters. However, these lockup agreements do not apply to an aggregate of

1,000,000 shares of our common stock held by entities affiliated with our significant stockholder Baker Brothers Investments and an aggregate of 600,000 shares of our common stock held by an entity affiliated with our director William W. Featheringill. As of September 30, 2009, affiliates of Baker Brothers Investments beneficially owned approximately 14.4% of our outstanding common stock prior to this offering and Mr. Featheringill beneficially owned approximately 9.2% of our outstanding common stock prior to this offering. See Underwriters.

Table of Contents

We have anti-takeover provisions in our corporate charter documents that may result in outcomes with which you do not agree.

Our board of directors has the authority to issue up to 4,905,000 shares of undesignated preferred stock and to determine the rights, preferences, privileges and restrictions of those shares without further vote or action by our stockholders. The rights of the holders of any preferred stock that may be issued in the future may adversely affect the rights of the holders of common stock. The issuance of preferred stock could make it more difficult for third parties to acquire a majority of our outstanding voting stock.

In addition, our certificate of incorporation provides for staggered terms for the members of the board of directors and supermajority approval of the removal of any member of the board of directors and prevents our stockholders from acting by written consent. Our certificate also requires supermajority approval of any amendment of these provisions. These provisions and other provisions of our by-laws and of Delaware law applicable to us could delay or make more difficult a merger, tender offer or proxy contest involving us.

In June 2002, our board of directors adopted a stockholder rights plan and, pursuant thereto, issued preferred stock purchase rights, referred to as the Rights, to the holders of our common stock. The Rights have certain anti-takeover effects. If triggered, the Rights would cause substantial dilution to a person or group of persons who acquires more than 15% (19.9% for William W. Featheringill, a Director who beneficially owned approximately 9.2% as of September 30, 2009, but owned more than 15% at the time the Rights were put in place) of our common stock on terms not approved by the board of directors. In August 2007, this plan was amended for a transaction involving funds managed by or affiliated with Baker Brother Investments such that they could purchase up to 25% without triggering the Rights. At September 30, 2009, such group beneficially owned approximately 14.4% of our stock.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

As of the date of this prospectus supplement, we cannot specify with certainty the particular uses for the net proceeds we will receive from this offering. Management will have broad discretion in the application of the net proceeds, including any of the purposes described in Use of Proceeds. The failure by our management to apply these funds effectively could have a material adverse effect on our business.

We have never paid dividends on our common stock and do not anticipate doing so in the foreseeable future.

We have never paid cash dividends on our stock. We currently intend to retain all future earnings, if any, for use in the operation of our business. Accordingly, we do not anticipate paying cash dividends on our common stock in the foreseeable future.

Exercise of outstanding options and warrants will dilute stockholders and could decrease the market price of our common stock.

As of September 30, 2009, we had issued and outstanding approximately 38.7 million shares of common stock, outstanding options to purchase approximately 6.3 million additional shares of common stock and warrants (exercisable at $10.25 per share) to purchase an additional 3.2 million shares of our common stock. The existence of the outstanding options and warrants may adversely affect the market price of our common stock and the terms under which we could obtain additional equity capital.

Table of Contents

FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus, including the information we incorporate by reference, contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, referred to as the Exchange Act, which are subject to the safe harbor created in Section 21E. All statements other than statements of historical facts contained in this prospectus supplement, the accompanying prospectus and the information we incorporate by reference are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as may, could, will, should, expect, plan, anticipate, bel estimate, intend, predict, seek, potential or continue or the negative of these words or similar expressions. Sta that describe our future plans, strategies, intentions, expectations, objectives, goals or prospects are also forward-looking statements. These forward-looking statements include, but are not limited to, statements about:

- the initiation, timing, progress and results of our preclinical testing, clinical trials, and other research and development efforts;
- the potential funding from our contract with HHS for the development of peramivir;
- the potential for a stockpiling order or profit from any order for peramivir;
- the potential use of peramivir as a treatment for H1N1 flu (or other strains of flu);
- the further preclinical or clinical development and commercialization of our product candidates, including peramivir, forodesine and other PNP inhibitor and hepatitis C development programs;
- the implementation of our business model, strategic plans for our business, product candidates and technology;
- our ability to establish and maintain collaborations;
- plans, programs, progress and potential success of our collaborations, including Mundipharma for forodesine and Shionogi and Green Cross for peramivir;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- our ability to operate our business without infringing the intellectual property rights of others;
- estimates of our expenses, future revenues, capital requirements and our needs for additional financing;
- the timing or likelihood of regulatory filings and approvals;
- our financial performance; and
- competitive companies, technologies and our industry.

These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these

forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under Risk Factors and elsewhere in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference. Any forward-looking statement reflects our current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, industry and future growth. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

Discussions containing these forward-looking statements are also contained in Management s Discussion and Analysis of Financial Condition and Results of Operations incorporated by reference from our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q for the quarters ended since our most recent Annual Report, our Current Reports on Form 8-K, as well as any amendments we make to those filings with the SEC.

Table of Contents

USE OF PROCEEDS

We estimate that the net proceeds to us from our sale of the 5,000,000 shares of common stock offered by us at the public offering price of $9.75 per share will be approximately $45.6 million, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise their over-allotment option in full, we estimate that the net proceeds to us will be approximately $52.6 million. We intend to use the net proceeds of this offering for general corporate purposes, including funding our research and development efforts, clinical development of forodesine and BCX-4208 and pre-commercialization activities relating to i.v. peramivir and forodesine.

Table of Contents

CAPITALIZATION

The following table sets forth our cash, cash equivalents and marketable securities and our capitalization as of September 30, 2009:

- on an actual basis; and
- on an as adjusted basis to give effect to the sale of the 5,000,000 shares of common stock offered by us at the public offering price of $9.75 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The information presented in this table should be read in conjunction with, and is qualified in its entirety by reference to, the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus, including our financial statements and related notes incorporated by reference herein.

	As of September 30, 2009	
	Actual	As Adjusted
	(unaudited)	
	(in thousands)	
Cash, cash equivalents and marketable securities	$ 38,492	$ 84,136
Current and long-term debt		
Stockholders equity:		
Preferred stock: shares authorized 5,000,000; Series B Junior Participating Preferred Stock, $.001 par value; shares authorized 95,000; no shares issued and outstanding		
Common stock, $.01 par value: shares authorized 95,000,000; 38,734,715 shares issued and outstanding, actual; 43,734,715 shares issued and outstanding, as adjusted	387	437
Additional paid-in capital	300,989	346,583
Accumulated other comprehensive income	40	40
Accumulated deficit	(277,871)	(277,871)
Total stockholders equity	23,545	69,189
Total capitalization	$ 23,545	$ 69,189

Table of Contents

DILUTION

As of September 30, 2009, our net tangible book value was approximately $42.0 million, or approximately $1.08 per share of common stock. Net tangible book value per share represents the amount of our total assets, excluding deferred collaboration expenses, less total liabilities, excluding deferred collaboration revenues, divided by the 38,734,715 shares of our common stock outstanding as of September 30, 2009. After giving effect to our sale of the 5,000,000 shares of common stock offered by us at the public offering price of $9.75 per share, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, the net tangible book value as of September 30, 2009 would have been approximately $87.6 million, or approximately $2.00 per share. This represents an immediate increase in net tangible book value of $0.92 per share to existing stockholders and an immediate dilution in net tangible book value of $7.75 per share to new investors purchasing shares of common stock at the assumed public offering price.

The following table illustrates this dilution on a per share basis:

Public offering price per share		$ 9.75
Net tangible book value per share as of September 30, 2009	$ 1.08	
Increase in net tangible book value per share attributable to new investors	0.92	
Net tangible book value per share as of September 30, 2009 after giving effect to this offering		2.00
Dilution in net tangible book value per share to new investors		$ 7.75

In the discussion and table above, we assume no exercise of outstanding options. As of September 30, 2009, there were outstanding options to purchase a total of 6,315,630 shares of common stock at a weighted average exercise price of $6.98 per share and warrants to purchase 3,159,895 shares of common at an exercise price of $10.25 per share. To the extent that any of these stock options or warrants are exercised, there may be further dilution to new public investors.

Table of Contents

PRICE RANGE OF COMMON STOCK AND DIVIDEND POLICY

Our common stock is listed on The Nasdaq Global Market under the symbol BCRX. The following table sets forth, for the periods indicated, the range of high and low sales prices for our common stock, as reported by The Nasdaq Global Market.

	High	Low
Year Ended December 31, 2007		
1st Quarter	$ 12.50	$ 7.80
2nd Quarter	10.05	6.57
3rd Quarter	13.18	7.20
4th Quarter	8.33	5.68
Year Ended December 31, 2008		
1st Quarter	$ 6.53	$ 2.81
2nd Quarter	4.98	2.58
3rd Quarter	3.60	2.40
4th Quarter	3.18	.85
Year Ending December 31, 2009		
1st Quarter	$ 2.37	$ 1.15
2nd Quarter	4.99	1.65
3rd Quarter	13.47	3.65
4th Quarter (through November 19, 2009)	12.70	7.68

The reported last sale price of our common stock on The Nasdaq Global Market on November 19, 2009 was $10.40 per share. As of November 9, 2009 there were approximately 238 holders of record of our common stock.

We have never paid cash dividends and do not anticipate paying cash dividends in the foreseeable future.

Table of Contents

DESCRIPTION OF CAPITAL STOCK

The following summary description of our capital stock summarizes general terms and provisions that apply to the capital stock. Because this is only a summary, it does not contain all of the information that may be important to you. This summary is subject to and qualified in its entirety by reference to our restated certificate of incorporation, as amended, by-laws, as amended, and the rights agreement, as amended, each of which are on file with the SEC. See Where You Can Find More Information.

Authorized and Outstanding Capital Stock

Our authorized capital stock consists of 95,000,000 shares of common stock, par value $0.01 per share, and 5,000,000 shares of preferred stock, par value $0.01 per share, of which 95,000 shares are designated Series B Junior Participating Preferred Stock with a par value of $0.001 per share. On November 9, 2009, there were 38,883,408 shares of common stock outstanding and no shares of preferred stock outstanding.

Common Stock

Holders of our common stock are entitled to one vote per share on all matters submitted to a vote of stockholders and may not cumulate votes for the election of directors. Common stockholders have the right to receive dividends as and when declared by the Board of Directors from funds legally available therefor, subject to any preferential dividend rights of any preferred stock then outstanding. Upon our dissolution or liquidation, common stockholders are entitled to receive all assets legally available for distribution to stockholders, subject to any preferential rights of any preferred stock then outstanding. Holders of common stock have no preemptive rights and have no rights to convert their common stock into any other securities.

Preferred Stock

Preferred stock may be issued from time to time in one or more series, each such series to have such terms as determined by our Board of Directors. Our Board of Directors has the authority to determine and fix such voting powers, full or limited, or no voting powers, and such designations, preferences and relative participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including without limitation dividend rights, conversion rights, redemption privileges and liquidation preferences, without further vote or action by our stockholders. We will distribute a prospectus supplement with regard to each particular series of preferred stock that will describe the terms and provisions of that series of preferred stock. The rights of the holders of any preferred stock that may be issued may adversely affect the rights of the holders of common stock. The issuance of preferred stock could make it more difficult for third parties to acquire a majority of our outstanding voting stock.

Preferred Stock Purchase Rights

In June 2002, our board of directors adopted a stockholder rights plan and, pursuant thereto, issued preferred stock purchase rights, referred to as the Rights, to the holders of our common stock. Each share of common stock issued after adoption of the rights plan also includes one preferred share purchase right. The Rights have certain anti-takeover effects. If triggered, the Rights would cause substantial dilution to a person or group of persons who acquires more than 15% (19.9% for William W. Featheringill, a Director who beneficially owned approximately 9.2% as of