BIOCRYST PHARMACEUTICALS INC
Form 424B3
August 30, 2007

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Registration No. 333-145638

PROSPECTUS

8,140,000 Shares of
Common Stock

This prospectus relates to the disposition from time to time of up to 8,140,000 shares of our outstanding common stock in the aggregate, which are held by the selling stockholders named on page 22 of this prospectus.

We will not be paying any underwriting discounts or commissions in this offering. We will not receive any proceeds from sale of shares included in this prospectus.

Our common stock, par value $0.01 per share, trades on the Nasdaq Global Market under the symbol BCRX. On August 29, 2007, the reported last sale price of our common stock on the Nasdaq Global Market was $11.37 per share.

The selling stockholders or their pledges, assignees or successors-in-interest may offer and sell or otherwise dispose of the shares of common stock described in this prospectus from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. See Plan of Distribution beginning on page 23 for more information about how the selling stockholders may sell or dispose of their shares of common stock.

The selling stockholders may resell the common stock to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions. The selling stockholders will bear all commissions and discounts, if any, attributable to the sales of shares. We will bear all costs, expenses and fees in connection with the registration of the shares.

Investing in our common stock involves a high degree of risk. See Risk Factors beginning on page 5 of this prospectus.

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

The date of this prospectus is August 30, 2007.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, using a shelf registration or continuous offering process. Under this shelf process, certain selling stockholders may from time to time sell the shares of common stock described in this prospectus in one or more offerings.

All references to Company we, our or us refer solely to BioCryst Pharmaceuticals, Inc. and not to the persons who manage us or sit on our Board of Directors. Reference to selling stockholders refers to those stockholders listed herein under Selling Stockholders beginning on page 21 of this prospectus, who may sell shares from time to time as described in this prospectus. All trade names used in this prospectus are either our registered trademarks or trademarks of their respective holders.

You should rely only on the information contained or incorporated by reference into this prospectus or any applicable prospectus supplement. We have not, and the selling stockholders have not, authorized anyone to provide you with different information. The selling stockholders are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where it is lawful to do so. The information in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of our common stock.

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PROSPECTUS SUMMARY

This summary highlights information contained elsewhere or incorporated by reference into this prospectus. Because it is a summary, it does not contain all of the information that you should consider before investing in our securities. You should read this entire prospectus carefully, including the section entitled Risk Factors and the documents that we incorporate by reference into this prospectus, before making an investment decision.

Business of BioCryst Pharmaceuticals, Inc.

Overview

BioCryst Pharmaceuticals, Inc. is a biotechnology company that designs, optimizes and develops novel drugs that block key enzymes involved in viral infections, cancer, autoimmune diseases, and cardiovascular diseases. We integrate the necessary disciplines of biology, crystallography, medicinal chemistry and computer modeling to effectively use structure-based drug design to discover and develop small molecule pharmaceuticals.

Our business strategy is to increase the value of our drug candidate portfolio. We believe this is best achieved by retaining full product rights to drug product candidates within specialty markets, while relying on collaborative arrangements with third parties for drug product candidates within larger markets or outside our area of expertise. Potential third party alliances could include preclinical development, clinical development, regulatory approval, marketing, sales and distribution of our drug product candidates.

We have established collaborative relationships for development and commercialization of product candidates in their respective territories as follows:

F. Hoffmann-LaRoche and Hoffmann LaRoche Inc., which we call Roche, for BCX-4208 worldwide;

Mundipharma Internal Holdings Limited, which we call Mundipharma, for Fodosine™ in Europe, Asia and Australasia;

Shionogi & Co. Ltd., which we call Shionogi, for peramivir in Japan; and

Green Cross Corporation, which we call Green Cross, for peramivir in Korea.

The process of establishing and implementing collaborative relationships is difficult, time-consuming and involves significant uncertainty. See Risk Factors for further details.

Clinical Development Projects

Peramivir

Peramivir, a neuraminidase inhibitor, is in development for the treatment of influenza with two parenteral formulations, intramuscular and intravenous, which we call i.m and i.v.

Previous development of peramivir in an oral formulation was conducted through a worldwide license agreement between the Company and The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil Pharmaceutical Inc. (both Johnson & Johnson companies). Johnson & Johnson made the business decision to terminate this agreement

in 2001 and returned all rights to us. In June 2002, we completed an ongoing Phase III trial that had been started by Johnson and Johnson and subsequently terminated development of our oral peramivir program as a result of missing the primary endpoint in this pivotal trial.

We re-initiated clinical development of peramivir during 2006 with a focus on i.m. and i.v. delivery. During 2006, we tested peramivir in multiple Phase I trials in healthy volunteers and early in 2007 initiated a Phase II trial with the i.m. formulation. In the third quarter of 2007, we enrolled our first patient in a Phase II trial with the i.v. formulation in patients hospitalized due to influenza. We plan to be ready to enroll patients in a pivotal Phase III program with the i.m. formulation, beginning in the 2007-2008 influenza season. Except for in Japan and Korea, where we have granted licenses to Shionogi and Green Cross, respectively, to commercialize peramivir, we have not licensed our rights to peramivir.

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In January 2007, we announced that the U.S. Department of Health and Human Services, or HHS, had awarded us a $102.6 million, four-year contract for the advanced development of peramivir. Funding from the contract will support manufacturing of clinical lots, process validation, clinical studies and other U.S. product approval requirements.

*Fodosine*tm

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

We expect to begin enrollment during the third quarter of 2007 into a global pivotal Phase II with an oral formulation of Fodosinetm for patients with cutaneous T-cell lymphoma, commonly called CTCL. The trial will be conducted in the U.S. under a special protocol assessment, known as an SPA, negotiated with the U.S. Food and Drug Administration, or the FDA.

Additionally, Fodosinetm is currently in a Phase II trial for treatment of chronic lymphocytic leukemia, commonly called CLL and in other phases of development in various cancer settings.

Fodosinetm has been granted Orphan Drug status by the FDA for three indications:

- T-cell non-Hodgkin s lymphoma, including CTCL;
- CLL and related leukemias including T-cell prolymphocytic leukemia, adult T-cell leukemia, and hairy cell leukemia; and
- B-cell acute lymphoblastic leukemia, commonly called B-ALL.

Additionally the FDA has granted fast track status to the development of Fodosinetm for the treatment of relapsed or refractory T-cell leukemia.

BCX-4208

BCX-4208 is our second generation PNP inhibitor being developed for the treatment of autoimmune diseases and for the prevention of acute rejection in transplantation. In November 2005, we announced that we had entered into an exclusive worldwide development and commercialization agreement with Roche. In the third quarter of 2007, we announced that Roche had begun enrollment of patients with moderate to severe psoriasis into a Phase IIa trial.

Early Stage Development Projects

We are also conducting exploratory work on several early stage projects. Based on our strategy, we have prioritized our early-stage candidates focusing on a set of additional PNP inhibitors in the areas of autoimmune diseases, gout and HIV. We retain the worldwide commercial rights to all these specific PNP inhibitors. In addition, we are pursuing preclinical work in hepatitis C and have selected for further development a recently discovered compound.

Because none of our products have been approved by regulatory authorities, we may not be able to generate significant revenue or attain profitability. Since our inception, we have not generated any product sales from our drug discovery and development efforts and we have a history of significant losses. Given that we expect to incur substantial net losses to develop our potential products, it is unclear when, if ever, we will become profitable. See Risk

Factors for a full discussion of these and other risks relating to our business and owning our capital stock.

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Recent Developments

On August 9, 2007, we sold to a group of existing stockholders in a private placement:

8,315,513 shares of the Company s common stock at a purchase price of $7.80 per share, the closing Nasdaq composite bid price on August 3, 2007, the last trading date prior to the agreement reached prior to the opening of trading on August 6, 2007; and

warrants (exercisable at $10.25 per share) to purchase 3,159,895 shares of the Company s common stock, for a purchase price of $0.125 per warrant share.

The aggregate purchase price was approximately $65.3 million. The investors included funds managed by Baker Brothers Investments, Kleiner Perkins Caufield & Byers, EHS Holdings, OrbiMed Advisors, Texas Pacific Group Ventures, and Stephens Investment Management, all of whom are current stockholders.

We relied upon the exemptions from registration provided by Section 4(2) of the Securities Act and Regulation D promulgated under that section. Each investor represented that it was an accredited investor, as such term is defined in Regulation D under the Securities Act, and that it was acquiring the common stock and warrants for its own account and not with a view to or for sale in connection with any distribution thereof, and appropriate legends are affixed to the common stock and warrants.

We have filed with the SEC all of our agreements regarding the private placement with the selling stockholders, with our Current Report on Form 8-K filed August 7, 2007 and our Quarterly Report on Form 10-Q filed August 9, 2007. We made no other agreements, plans or arrangements with the selling stockholders in connection with the private placement.

We paid no investment banking fees or commissions in connection with the private placement. We estimate the aggregate market value of our common stock held by non-affiliates (based upon the Nasdaq Global Market closing sales price on August 29, 2007) was approximately $277.7 million.

The shares and warrants included in the private placement were not registered under the Securities Act of 1933, as amended. Under the purchase agreement for the private placement, we agreed to register for resale under the Securities Act the shares, the warrants and the shares issuable upon exercise of the warrants sold to the selling stockholders. If registration statements covering such shares, warrants and shares issuable upon exercise of the warrants are not filed by us or declared effective by the SEC, within the periods specified in the purchase agreement, or if effectiveness of a registration statement is suspended for longer than the periods specified in the purchase agreement, we must pay to each investor, as liquidated damages and not as a penalty, a cash payment equal to 1.5% of the aggregate purchase price per month, up to a maximum of 12%, paid by such investor to us with respect to the shares then held by such selling stockholder which are not then registered under an effective registration statement, until such event has been cured. No such amounts shall be payable by us in respect of the warrants or the shares issuable upon exercise of the warrants. We have agreed to maintain the effectiveness of the registration statements covering such securities until the earlier of August 9, 2009, the date all of such securities may be sold without restriction of the value limitations under Rule 144(e) of the Securities Act or the date all of such securities have been sold.

We are filing this registration statement and prospectus as required by the purchase agreement. We will not receive any proceeds from the resale of the common stock by the investors.

We expect to file a subsequent registration statement in the future for the resale by the selling stockholders of the balance of approximately 0.2 million shares of common stock purchased and the warrants to buy approximately 3.2 million shares of common stock, including shares to be issued upon exercise of the warrants.

The private placement

- increases our concentration of stock ownership, which could limit the influence of other stockholders and delay, defer or prevent a change in our control;

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upon registration of the shares covered by this prospectus, increases the number of shares of our common stock eligible for sale, which could depress our stock price and adversely affect the trading market for our stock; and

exercise of the warrants above their exercise price of $10.25 will result in dilution to our other stockholders and more shares eligible for sale, which could depress our stock price.

Please review the risk factors under the heading Risks Relating to Our Common Stock for more information on these risks.

BioCryst is a Delaware corporation originally founded in 1986. Our principal 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.

The Offering

Issuer	BioCryst Pharmaceuticals, Inc.
Selling Stockholders	The selling stockholders identified in the table on page 22. They purchased our common stock and warrants in August 2007.
Securities Offered	8,140,000 shares of our common stock.
Use of Proceeds	We will not receive any proceeds from sales of the shares of common stock sold from time to time under this prospectus by the selling stockholders.
Risk Factors	An investment in our common stock involves a high degree of risk. See Risk Factors beginning on page 5 for a discussion of certain factors that you should consider when evaluating an investment in our common stock.
Nasdaq Global Market Symbol	BCRX

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RISK FACTORS

An investment in our stock involves a high degree of risk. You should consider carefully the following risks, along with all of the other information included in or incorporated by reference into this prospectus and any prospectus supplement, before deciding to buy our common stock. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also impair our business operations. If we are unable to prevent events that have a negative effect from occurring, then our business may suffer. Negative events are likely to decrease our revenue, increase our costs, make our financial results poorer and/or decrease our financial strength, and may cause our stock price to decline. In that case, you may lose all or a part of your investment in our common stock.

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. As of June 30, 2007, our accumulated deficit was approximately $211.3 million. 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 or when we will become profitable, if at all. 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. 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 beyond our control, 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;

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

delays or changes in requirements by governmental agencies.

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.

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.

To date, we have financed our operations primarily from sale of our equity securities and cash from collaborative and other research and development agreements including government contracts, and, to a lesser extent, interest. For the year, our cash, cash equivalents and marketable securities balance has decreased from $46.2 million as of December 31, 2006 to $42.5 million as of June 30, 2007, primarily due to the monthly cash burn from operations less the cash received from collaborations. Our gross cash burn for the first six months of 2007 was significantly offset by the reimbursement from Mundipharma for the clinical expenses incurred in 2006 and 2007, plus the event payment and upfront payment received from Mundipharma and Shionogi, respectively. We are continuing to project our net cash burn rate to average approximately $3.0 million per month in 2007. We caution that our revenues, our expenses and our cash flows will vary significantly from quarter to quarter due to the nature of the trials in influenza and the reimbursement from HHS. Given that our average monthly burn rate in the first six months of 2007 was much lower than $3 million, we expect the average monthly burn rate for the remaining six months of 2007 will be correspondingly higher.

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 drug candidates will consume significant capital resources and will increase our expenses. 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 drug 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 drug candidates, 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.

As of June 30, 2007, we had $42.5 million in cash, cash equivalents and marketable securities. In August 2007, we completed a $65.3 million private placement of unregistered common stock and warrants to certain existing stockholders. Our outstanding common stock increased by approximately 8.3 million shares. Our fully-diluted outstanding shares increased by an additional approximately 3.2 million shares pursuant to warrants exercisable at $10.25 per share. We are required to register the shares within 90 days, or 120 days if reviewed by the SEC. Failure to have the shares registered in this timeframe would trigger liquidated damages of 1.5% per month on the common stock purchase price, up to a maximum of 12%, which could have a significant impact on our cash. With our currently available funds and the amounts to be received from HHS, Shionogi and our other collaborators, we believe these resources will be sufficient to fund our operations for at least the next twelve months. However, this is a forward looking statement, and there may be changes that would consume available resources significantly before such time.

Our long-term capital requirements and the adequacy of our available funds will depend upon many factors, including, but not limited to:

- our ability to perform under the contract with HHS and receive reimbursement;

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- the progress and magnitude of our research, drug discovery and development programs;
- changes in existing collaborative relationships or government contracts;
- our ability to establish additional collaborative relationships with academic institutions, biotechnology or pharmaceutical companies and governmental agencies or other third parties;
- the extent to which our partners, including governmental agencies will share in the costs associated with the development of our programs or run the development programs themselves;
- our ability to negotiate favorable development and marketing strategic alliances for certain drug candidates; or our ability to build or expand internal development and commercial capabilities;
- our ability to achieve successful commercialization of marketed products by either us or a partner;
- the scope and results of preclinical studies and clinical trials to identify and evaluate drug candidates;
- our ability to enroll sites and patients in our clinical trials;
- the scope of manufacturing of our drug candidates to support our preclinical research and clinical trials;
- increases in personnel and related costs to support the development of our drug candidates;
- the scope of validation for the manufacturing of our drug substance and drug products required for future NDA filings;
- competitive and technological advances;
- the time and costs involved in obtaining regulatory approvals; and
- the costs involved in all aspects of intellectual property strategy and protection including the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims;

We expect that we will be required to raise additional capital to complete the development and commercialization of our current product candidates. 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 the 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, this would have a significant negative impact on our anticipated revenues and cash flows and the development of peramivir.

Our projections of revenues and incoming cash flows for 2007 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.

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 unfavorable termination provisions and are subject to audit and modification by the government at its sole discretion. 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, which would have a significant negative impact on our cash flows and operations.

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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 do 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 four pharmaceutical companies, Roche, Mundipharma, and Shionogi and Green Cross for development and commercialization of BCX-4208, Fodosine^{tm} and peramivir, respectively. 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;

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- our ability to generate future event payments and royalties from our partners depends upon their abilities to establish the safety and efficacy of our drug candidates, obtain regulatory approvals and achieve market acceptance of products developed from our drug 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. 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;

- 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;

- 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 contract research organizations do not successfully carry out their duties or if we lose our relationships with contract research organizations, our drug development efforts could be delayed.

We depend on contract research organizations, third-party vendors and investigators for preclinical testing and clinical trials related to our drug discovery and development efforts, including the HHS contract. We intend to depend on them to assist in our future discovery and development efforts. These parties are not our employees and we cannot control the amount or timing of resources that they devote to our programs. If they

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fail to devote sufficient time and resources to our drug development programs or if their performance is substandard, it will delay the approval of our products. The parties with which we contract for execution of our clinical trials play a significant role in the conduct of the trials and the subsequent collection and analysis of data. Their failure to meet their obligations could adversely affect clinical development of our products. Moreover, these parties may also have relationships with other commercial entities, some of which may compete with us. If they assist our competitors it could harm our competitive position.

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 current Good Laboratory Practices (cGLP), current Good Manufacturing Practices (cGMP), or current Good Clinical Practices (cGCP), and similar foreign standards and 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.

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;
- obtaining, shipping, testing and storing patient samples from our clinical trials;
- execution of additional toxicology studies that may be required to obtain approval for our product candidates;
- 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; and
- management of our regulatory function.

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, this would delay or prevent the development of our product candidates.

Our development of both intravenous and intramuscular dosing of peramivir for avian and seasonal 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

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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 Phase II clinical development, have been tested in a limited number of humans, and may not be safe or effective;
- necessary government or other third party funding for clinical testing and further development of peramivir may not be available timely, at all, or in sufficient amounts;
- the avian flu prevention or 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 avian 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 avian flu drugs and vaccines;
- 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.

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.

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;
- 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.

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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 the clinical trials of our drug product candidates fail, our product candidates will not be marketed, and we will not realize product related revenue.

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. If we or other third party partners are unable to demonstrate that our product candidates are safe and effective, our product candidates will not receive regulatory approval and will not be marketed, and we will not realize product related revenue. 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. Positive results from preclinical studies and early clinical trials do not ensure positive results in clinical trials designed to permit application for regulatory approval, called pivotal clinical trials. We may suffer significant setbacks in pivotal clinical trials, even after earlier clinical trials show promising 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.

We negotiated a special protocol assessment, or SPA, with the FDA for the planned pivotal clinical trial of our lead anti-cancer compound, Fodosine^{tm}, for treatment of CTCL. A previous pivotal clinical trial under an SPA of Fodosine^{tm} for treatment of T-cell acute lymphoblastic leukemia was voluntarily put on hold by us. An SPA is an agreement between an applicant and the FDA on the design and the size of clinical trials that is intended to form the basis of a New Drug Application (NDA). Once the FDA and an applicant reach an agreement on an SPA, the SPA cannot be changed after the clinical trial begins, except in limited circumstances such as a change in the science or clinical knowledge about the conditions being studied. Any significant change to the protocols for a clinical trial subject to an SPA would require prior FDA approval, which could delay implementation of such a change and

continuation and completion of the related clinical trial. Receipt of the SPA does not ensure that Fodosine[tm] will receive FDA approval or that the process will be accelerated.

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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.

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 FDA approval process is typically lengthy and expensive, and approval is never certain. Products distributed abroad are also subject to foreign government regulation. Neither the FDA nor foreign regulatory agencies have approved any of our drug product candidates. We have several drug products in various stages of preclinical and clinical development; however, we are unable to determine when, if ever, any of these products will be commercially available. 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 II 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 II 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.

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If we fail to meet certain registration deadlines for common stock sold in August 2007, we face substantial liquidated damages.

We have agreed to meet certain registration deadlines relating to the common stock, warrants and underlying common stock we sold in August 2007. If we fail to meet such deadlines, we face liquidated damages of up to approximately $7.8 million in cash. This would adversely affect our cash resources and our stock price.

If our drug product candidates do not achieve broad market acceptance, our business may never become profitable.

Our drug product candidates may not gain the market acceptance required for us to be profitable even if they successfully complete initial and final clinical trials and receive approval for sale by the FDA or foreign regulatory agencies. The degree of market acceptance of any product candidates that we or our partners develop will depend on a number of factors, including but not limited to:

our clinical evidence of safety and efficacy;

cost-effectiveness, convenience and ease of use of our product candidates;

their safety, availability and effectiveness relative to alternative treatments;

the actual and potential side effects or other reactions;

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