BIOCRYST PHARMACEUTICALS INC
Form 10-K
March 09, 2010

Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

þ **Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the fiscal year ended December 31, 2009

OR

o **Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.**
For the transition period from _____ to _____.

Commission File Number 000-23186
BIOCRYST PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

DELAWARE	**62-1413174**
(State of other jurisdiction of incorporation or organization)	(I.R.S. employer identification no.)

2190 Parkway Lake Drive; Birmingham, Alabama 35244
(Address of principal executive offices)
(205) 444-4600
(Registrant s telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $.01 Par Value	The NASDAQ Global Market

Securities registered pursuant to Section 12(g) of the Act:
Title of each class
None

Indicate by a check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No þ.
Indicate by a check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No þ.
Indicate by a check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes þ No o.
Indicate by a check mark whether the registrant submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes o No o.
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (Section 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o	Accelerated filer þ	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

Indicate by a check mark whether the registrant is a shell company (as defined in Exchange Act Rule 12b-2). Yes o No þ.

The Registrant estimates that the aggregate market value of the Common Stock on June 30, 2009 (based upon the closing price shown on the NASDAQ Global Market[SM] on June 30, 2009) held by non-affiliates was approximately $103,200,832.

The number of shares of Common Stock, par value $.01, of the Registrant outstanding as of March 1, 2010 was 43,957,153 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant s definitive Proxy Statement to be filed in connection with the solicitation of proxies for its 2010 Annual Meeting of Stockholders are incorporated by reference into Items 10, 11, 12, 13 and 14 under Part III hereof.

TABLE OF CONTENTS

PART I	
ITEM 1. BUSINESS	2
ITEM 1A. RISK FACTORS	21
ITEM 1B. UNRESOLVED STAFF COMMENTS	35
ITEM 2. PROPERTIES	35
ITEM 3. LEGAL PROCEEDINGS	35
ITEM 4. (REMOVED AND RESERVED)	35
PART II	36
ITEM 5. MARKET FOR REGISTRANT S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES	36
ITEM 6. SELECTED FINANCIAL DATA	39
ITEM 7. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	40
ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	50
ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	51
ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	72
ITEM 9A. CONTROLS AND PROCEDURES	72
ITEM 9B. OTHER INFORMATION	73
PART III	73
ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	73
ITEM 11. EXECUTIVE COMPENSATION	73
ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	73
ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE	73
ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES	73
PART IV	74
ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES	74
SIGNATURES	75
INDEX TO EXHIBITS	76
EX-10.13	
EX-10.16	
EX-10.33	
EX-23	
EX-31.1	
EX-31.2	
EX-32.1	
EX-32.2	

Table of Contents

PART I

ITEM 1. BUSINESS

Forward-Looking Statements and Risk Factors

This report includes forward-looking statements. In particular, statements about our expectations, beliefs, plans, objectives or assumptions of future events or performance are contained or incorporated by reference in this report. We have based these forward-looking statements on our current expectations about future events. While we believe these expectations are reasonable, forward-looking statements are inherently subject to risks and uncertainties, many of which are beyond our control. Our actual results may differ materially from those suggested by these forward-looking statements for various reasons; including those discussed in this report under the heading Risk Factors . Given these risks and uncertainties, you are cautioned not to place undue reliance on forward-looking statements. The forward-looking statements included in this report are made only as of the date hereof. We do not undertake and specifically decline any obligation to update any of these statements or to publicly announce the results of any revisions to any forward looking statements to reflect future events or developments. When used in the report, unless otherwise indicated, we, our, us, the Company and BioCryst refers to BioCryst Pharmaceuticals, Inc.

Overview

BioCryst Pharmaceuticals, Inc. is a biotechnology company that designs, optimizes and develops novel drugs that block key enzymes involved in cancer, viral infections and autoimmune diseases. BioCryst integrates 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 agreements with third parties for product candidates within larger markets or outside our areas of expertise.

One of our most advanced product candidates is peramivir, an inhibitor of influenza neuraminidase. In May 2009, we announced preliminary results from the Phase II study of intramuscular (i.m.) peramivir for the treatment of seasonal influenza. This Phase II study was a randomized, double-blind, placebo-controlled trial conducted in influenza seasons in the Southern Hemisphere (Australia, New Zealand and South Africa) in 2008 and the Northern Hemisphere (United States) in 2008 to 2009. While the study demonstrated a numerical trend in its primary endpoint of improvement in the median time to alleviation of symptoms (TTAS) in subjects with confirmed, acute, uncomplicated influenza infection versus placebo, the difference between the two study groups was not statistically significant.

We are not planning additional development of i.m. peramivir at this time; instead, our current efforts are focused on development of the i.v. formulation.

In September 2009 we announced the initiation of two Phase III clinical trials of i.v. peramivir for the treatment of hospitalized patients with serious influenza. The combined enrollment target for these studies is approximately 700 patients, and approximately 300 study locations are targeted to participate in these studies globally. These studies are intended to support U.S. regulatory approval of i.v. peramivir as a treatment for influenza.

At the XI International Symposium on Respiratory Viral Infections in Bangkok, Thailand in February 2009, we presented the full data set from our Phase II clinical trial in hospitalized patients with acute influenza using an i.v. formulation of peramivir to compare the efficacy and safety of i.v. peramivir to orally administered oseltamivir. In October 2008 we reported results of an exploratory Phase II trial of i.v. peramivir in subjects hospitalized for acute serious or potentially life-threatening influenza.

In January 2007, the United States Department of Health and Human Services (HHS), awarded us a $102.6 million, four-year contract for the advanced development of peramivir. In September 2009, we received an award of $77.2 million toward completion of the Phase III development of i.v. peramivir pursuant to a contract modification with HHS. This additional funding brings the total award from HHS for the development of peramivir to

Table of Contents

$179.9 million and extends the contract term by 12 months to five years. Any funding above the $179.9 million may be our responsibility.

In September 2009, we received a request for proposal (RFP) from HHS for the supply of i.v. peramivir for the treatment of critically ill influenza patients under an Emergency Use Authorization (EUA). On November 4, 2009 we received an initial order for 10,000 courses of i.v. peramivir (600 mg once-daily for five days) for an aggregate purchase price of $22.5 million. We shipped the entire order from existing i.v. peramivir inventory to HHS on November 4, 2009. Under the Indefinite Delivery Indefinite Quantity contract issued to us on November 3, 2009, HHS may place additional orders for peramivir up to a total of 40,000 courses at the same unit price as the first order. We are also required to maintain the ability to manufacture additional treatment courses dependent on the volume and size of anti-viral orders received from HHS. In addition, separate from the RFP process, we have donated and transferred to HHS an initial supply sufficient for 1,200 courses of i.v. peramivir 600 mg once-daily for five days.

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 130,000 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 October 2009, the FDA, in response to a request from the U.S. Centers for Disease Control and Prevention, issued an 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.

In March 2007, we entered into a collaboration with Shionogi & Co., Ltd. (Shionogi) for the development and commercialization of peramivir in Japan. This exclusive license agreement for Japan included an upfront payment of $14 million and future clinical event milestone payments of up to $21 million. In October 2008, the Company and Shionogi amended the license agreement to expand the territory in the agreement to include Taiwan and to provide rights for Shionogi to perform a Phase III clinical trial in Hong Kong.

Shionogi previously completed a Phase II study of i.v. peramivir administered via a single dose infusion in the outpatient setting for treatment of seasonal influenza. Shionogi presented the data at the 2008 Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) / Infectious Diseases Society of America (IDSA) annual meeting in Washington, D.C.

In July 2009, Shionogi announced positive results in two Phase III clinical trials of i.v. peramivir. The studies were sponsored by Shionogi and conducted in Japan, Taiwan and South Korea during the 2008-2009 influenza season. Shionogi and Green Cross Corporation (Green Cross), 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. Shionogi presented the data at the 2009 ICAAC / IDSA annual meeting in San Francisco, California. Shionogi filed an NDA in Japan for i.v. peramivir in 2009.

In January 2010, Shionogi received marketing and manufacturing approval for i.v. peramivir in Japan. The filing of this application triggered a $7.0 million milestone payment to us under our current license agreement, and we received a third and final regulatory milestone payment of $7.0 million in January 2010 as a result of the application s approval. We may receive future commercial event milestone payments of up to $95 million from Shionogi. Shionogi has commercially launched peramivir under the commercial name RAPIACTA in Japan. Shionogi has received the indications of single dose administration of 300 mg i.v. peramivir for adult uncomplicated seasonal influenza infection, as well as single and multiple dose administration of 600 mg i.v. peramivir for the patients at high-risk for complications associated with influenza. Shionogi is authorized to supply peramivir as either a 300 mg i.v. bag or a 150 mg vial for i.v. drip infusion. Shionogi has completed clinical studies for pediatric patients and has filed an additional application for pediatric use of RAPIACTA in Japan.

Table of Contents

Additionally, in January 2010, we announced that Green Cross filed a New Drug Application in South Korea in January 2010 to seek regulatory approval for i.v. peramivir to treat patients with influenza.

In addition to Shionogi and Green Cross, we have entered into several agreements with companies outside the U.S. to represent us and peramivir primarily for stockpiling opportunities. For example, on December 23, 2009, we entered into an agreement with Merck Serono, S.A., through its affiliate, Ares Trading S.A., to exclusively represent us and peramivir for stockpiling opportunities in Europe, Russia, Canada and Singapore. Also in December 2009, we entered into an agreement with Hikma Pharmaceuticals, PLC to represent us and peramivir for stockpiling opportunities in the Middle East and North Africa, excluding Israel. In January, 2010 we entered into an agreement with moksha8 Pharmaceuticals, Inc. to exclusively represent us and peramivir for influenza stockpiling opportunities in Brazil and Mexico.

In addition, we have a binding letter of intent with NT Pharma, Co., Ltd. to exclusively represent us and peramivir for influenza stockpiling opportunities in China. We also have a binding letter of intent with Neopharm Scientific, Ltd. to exclusively represent us and peramivir for influenza stockpiling opportunities in Israel.

Another one of our most advanced drug candidates, forodesine, is a transition-state analog inhibitor of the enzyme purine nucleoside phosphorylase (PNP). Forodesine has been granted Orphan Drug status by the FDA for three indications: T-cell non-Hodgkin lymphoma, including Cutaneous T-cell Lymphoma (CTCL); Chronic Lymphocytic Leukemia (CLL) and related leukemias including T-cell prolymphocytic leukemia, adult T-cell leukemia, and hairy cell leukemia; and for treatment of B-cell acute lymphoblastic leukemia (B-ALL).

An oral formulation of the compound is currently under a pivotal trial for patients with CTCL. The trial is being conducted under a special protocol assessment (SPA) negotiated with the United States Food and Drug Administration (FDA) and, if successful, will serve as a basis for a new drug application (NDA) to the FDA using the oral formulation in patients with relapsed CTCL. In January 2010, we announced that we had achieved our protocol-specified objective of enrolling 100 late-stage patients (Stage IIB to IVA) in this pivotal study. We expect to report top-line data from this study in the second half of 2010.

Long-term data from our Phase II study of forodesine in patients with CTCL was presented at the 45th Annual Meeting of the American Society of Clinical Oncology. This poster presentation reviewed the safety and efficacy of forodesine for CTCL patients of stage Ib to stage IV who have failed standard therapies and received forodesine treatment for greater than 12 months.

Additionally, our exploratory Phase II study for forodesine in subjects with CLL is continuing to progress and has enrolled over half of its targeted number of patients. In December 2008, we announced interim data from the study in patients with CLL and data from a healthy subject pharmacokinetic and pharmacodynamic study. Subsequently, we amended the Phase II study to increase the dose of forodesine to 200mg twice daily and enrollment is ongoing. We expect to report top-line results from this study in the second half 2010.

In December 2007, we presented data related to the Phase I/II clinical study of forodesine in subjects with refractory CTCL and a poster detailing the in vitro activity of forodesine as a single agent and the synergistic in vitro activity of forodesine in combination with bendamustine in primary cells from 29 patients with CLL. These data were presented at the 2007 American Society of Hematology meeting.

Since February 2006, we have had an exclusive licensing agreement with Mundipharma International Holdings Limited (Mundipharma) to develop and commercialize forodesine in markets across the European Union (EU), 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.

Our other drug candidate in clinical trials is our second generation PNP inhibitor, BCX-4208. In November 2005, we entered into an exclusive worldwide development and commercialization agreement with Roche. In 2007 Roche initiated a Phase II clinical trial with oral doses of BCX-4208/R3421, which was designed to evaluate the drug candidate in patients with moderate to severe plaque psoriasis. The assessment of the study endpoints has been completed. Consistent with interim findings we reported in May 2008, the Phase II clinical study of BCX-4208, a potent, rationally designed, orally available PNP inhibitor, met its primary objectives of safety and tolerability. In addition, BCX-4208 displayed dose-dependent reductions in peripheral blood lymphocyte counts, including subsets measuring B cells (CD20), total T cells (CD3), T helper cells (CD4) and T suppressor/cytotoxic cells (CD8).

Table of Contents

Further, plasma levels of BCX-4208 increased with dose, and plasma uric acid levels showed dose-related reductions with BCX-4208. In addition, consistent with interim results we previously reported, no evidence of clinical efficacy, a secondary objective, was observed in psoriasis patients with doses and duration of administration tested. The dosing period was six weeks with the two lowest doses tested in our single and multiple ascending dose trials.

In the Phase IIa trial, BCX-4208 was generally safe and well-tolerated at doses up to 120 mg daily. Most adverse events reported were considered mild or moderate, and low in frequency. No opportunistic infections were observed. In addition, detailed laboratory and clinical monitoring did not indicate any patterns suggestive of off-target adverse findings.

Also in May 2008, we received notice that Roche was exercising the no cause termination right under the license agreement for BCX-4208. As a result, we regained worldwide rights to BCX-4208.

We recently initiated a clinical study 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 II clinical trial of BCX-4208 for psoriasis indicated a dose related to reduction in uric acid that was sustained for the duration of drug exposure. Our gout clinical trial is a Phase II, 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.

BioCryst is a Delaware corporation originally founded in 1986. Our Alabama office is located at 2190 Parkway Lake Drive, Birmingham, Alabama 35244, where the telephone number is (205) 444-4600 and our North Carolina office is located at 4505 Emperor Blvd., Suite 200, Durham, North Carolina 27703 where the telephone number is (919) 859-1302. For more information about BioCryst, please visit our website at www.biocryst.com. The information on our website is not incorporated into this Form 10-K.

Our Business Strategy

We design, optimize and develop novel drugs that block key enzymes involved in cancer, viral infections and autoimmune 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 maximize sustainable value by moving our drug candidate portfolio from discovery through clinical development, registration and ultimately to the market. We believe this is best achieved by retaining full product rights to our drug candidates within specialty markets, while relying on collaborative arrangements with third parties for drug 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 candidates. The principal elements of our strategy are:

Develop or License Inhibitors that are Promising Candidates for Commercialization. We test multiple compounds to identify those that are most promising for clinical development. We base our selection of promising development candidates on desirable product characteristics, such as initial indications of safety and efficacy. We believe that this focused strategy allows us to eliminate unpromising candidates from consideration sooner without incurring substantial clinical costs. In addition, our preference is to select drug candidates on the basis of their potential for relatively efficient Phase I and Phase II clinical trials that require fewer patients to initially indicate safety and efficacy. We will consider, however, more complex candidates with longer development cycles if we believe that they offer promising commercial opportunities.

Select and License Promising Enzyme Targets for the Discovery of Small-Molecule Pharmaceuticals. We use our technical expertise and network of academic and industry contacts to evaluate and select promising enzyme targets to license for the discovery of small-molecule pharmaceuticals. We choose enzyme targets that meet as many of the following criteria as possible:

Table of Contents

serve important functions in disease pathways;

have known animal or cell-based models that would be indicative of results in humans;

address large potential markets or niche areas with significant unmet medical need; and

have multiple potential clinical applications.

Focus on High Value-Added Structure-Based Drug Design Technologies. We focus our drug discovery activities and expenditures on applications of structure-based drug design technologies to design and develop drug candidates. Structure-based drug design is a process by which we design a drug candidate through detailed analysis of the enzyme target, which the drug candidate must inhibit in order to stop the progression of the disease or disorder. We believe that structure-based drug design is a powerful tool for efficient development of small-molecule drug candidates that have the potential to be safe, effective and relatively inexpensive to manufacture. Our structure-based drug design technologies typically allow us to design and synthesize multiple drug candidates that inhibit the same enzyme target. We believe this strategy can lead to broad patent protection and enhance the competitive advantages of our compounds.

An important element of our business strategy is to control fixed costs and overhead through contracting and entering into license agreements with other parties. We maintain a streamlined corporate infrastructure that focuses our expertise. By contracting with other specialty organizations, we believe that we can control costs, enable our drug candidates to reach the market more quickly and reduce our business risk. Key elements of our contracting strategy may include:

Entering Into Relationships with Academic Institutions. Many academic institutions perform extensive research on the molecular and structural biology of potential drug development targets. When we believe that an opportunity is beneficial for BioCryst we may enter into relationships with academic institutions. We will consider each opportunity and whether or not the relationship will significantly reduce the time, cost and risks involved in drug development. An example of such a collaborative relationship is the arrangement that we have with Albert Einstein College of Medicine of Yeshiva University (AECOM) and Industrial Research Limited (IRL) who are the licensors of our PNP inhibitor programs.

Developing Drug Candidates or Licensing Them to Other Parties. We generally plan to advance drug candidates through initial and/or early-stage drug development. We prefer to retain full product rights to our drug candidates within specialty markets, while relying on collaborative arrangements with third parties or drug candidates within larger markets or outside our area of expertise. For larger disease indications or those outside our area of expertise, our strategy is to license drug candidates to pharmaceutical or biotechnology partners for collaborative development and global marketing. We believe partnerships are a good source of development payments, license fees, future event payments and royalties. They also reduce the costs and risks, and increase the effectiveness, of late-stage product development, regulatory approval, manufacturing and marketing. We are willing to license a drug candidate to a partner during any stage of the development process we determine to be beneficial to us and to the ultimate development and commercialization of that drug candidate.

Products in Development

The following table summarizes our drug candidates in clinical development as of February 20, 2010:

Program and Candidate Disease Category/Indication	Delivery Form	Development Stage	Rights
PNP Inhibitor (forodesine)			BioCryst (U.S.)/Mundipharma
CTCL	Oral	Pivotal	(EU, Australia, Asia)
CLL	Oral	Phase II	
Neuraminidase Inhibitor (peramivir)			

Viral (Acute Influenza)	i.v.	Pivotal	BioCryst (U.S.)
Viral (Seasonal Influenza)	i.v.	Filed	Shionogi (East Asia)/Green Cross (Korea)

Table of Contents

Program and Candidate Disease Category/Indication	Delivery Form	Development Stage	Rights
PNP Inhibitor (BCX-4208/R3421)			
Gout	Oral	Phase II	BioCryst

Additional Products

In addition to the programs shown above, we also retain exclusive rights to other compounds in a number of therapeutic areas. These compounds are currently in pre-clinical development and include potent inhibitors of parainfluenza, neuraminidase, hepatitis C, JAK, Kallicrein and additional PNP inhibitors. We will continue to evaluate and test these compounds to determine which should be taken forward into clinical testing.

PNP Inhibitors

T-cell Related Diseases

Overview. The human immune system employs specialized cells, including T-cells, to control infection by recognizing and attacking disease-causing viruses, bacteria and parasites. T-cells are an essential part of the body s immune system that serve a dual purpose to both orchestrate and participate in the body s immune response. For the most part, this system works flawlessly to protect the body. However, when T-cells multiply uncontrollably, T-cell proliferative diseases, such as T-cell cancers, can occur.

The link between T-cell proliferation and the purine nucleoside phosphorylase, or PNP, enzyme was first discovered approximately twenty-five years ago when a patient, who was genetically deficient in PNP, exhibited limited T-cell activity, but reasonably normal activity of other immune functions. In other patients lacking PNP activity, the T-cell population was selectively depleted; however, B-cell function tended to be normal. Based on these findings and the results of cell culture studies, inhibiting PNP appears to produce primarily suppression of T-cells without significantly impairing the function of other non-lymphoid cells.

Acute Lymphoblastic Leukemia. Acute lymphocytic leukemia (ALL) is a type of blood cancer. Other names for ALL are acute lymphoblastic leukemia and acute lymphoid leukemia. ALL is the most common form of leukemia in children. ALL results from an acquired injury to the DNA of a single cell in the bone marrow.

T-cell Lymphoma. Lymphoma is a general term for a group of cancers that originate in the lymphatic system. T-cell lymphoma results when a T-lymphocyte (a type of white blood cell) undergoes a malignant change and begins to multiply, eventually crowding out healthy cells and creating tumors, which enlarge the lymph nodes and invade other sites in the body. CTCL is a primary skin neoplasm and accounts for nearly 50% of all T-cell malignancies.

T-cell Mediated Autoimmune Diseases. There are more than 80 clinically distinct autoimmune diseases such as psoriasis, rheumatoid arthritis, multiple sclerosis, and Crohn s disease, which appear to have activated T-cells as a major part of their pathogenesis. These diseases occur when the immune system attacks the body s own cells rather than invading microorganisms. Therefore, inhibition and/or elimination of activated T-cells could have a beneficial effect on these diseases.

Transplant Rejection. The greatest threat to transplant patients is rejection of the transplanted organ by the body s own immune system. For this reason, transplant recipients must take drugs to suppress the immune response and prevent rejection usually for the rest of their lives. A regimen combining several drugs is usually given and this treatment has to be continued indefinitely. For kidney transplant recipients, rejection of the new kidney by the patient s immune system can lead to loss of the transplanted organ and a return to dialysis. For heart, lung and liver transplant patients, loss of the transplanted organ presents an immediate threat to life.

B-cell Related Cancers

Overview. There are two types of lymphocytes in the broadest sense T-cells and B-cells. Although PNP inhibitors were developed specifically to block the T-cells, recent work indicates that the same biochemical event the intracellular accumulation of deoxyguanosine triphosphate (dGTP) also occurs in malignant B-cells. Furthermore, work of Dr. Varsha Gandhi at MD Anderson Cancer Center has shown that PNP inhibitors, when acting *in vitro* on B-cells from patients with CLL induce accumulation of dGTP with resultant apoptosis (cell death).

Table of Contents

These studies open the possibility of treating CLL, B-ALL and B-cell non-Hodgkin Lymphoma (NHL) with forodesine. Importantly, B-cell malignancies are considerably more prevalent than are the T-cell leukemias and lymphomas.

Our PNP Inhibitors

PNP Inhibition. PNP is an enzyme that plays an important role in T-cell proliferation, because it is necessary to maintain normal DNA synthesis in human T-cells. Selective inhibition of PNP causes certain nucleosides, including deoxyguanosine, to accumulate. As the concentration of deoxyguanosine increases within T-cells, it is converted by specific enzymes to dGTP. A high concentration of dGTP in T-cells causes an imbalance in the intra-cellular trinucleotide pool and thus causes cell death.

In June 2000, we licensed a series of potent PNP inhibitors from AECOM and IRL. The lead drug candidate from this collaboration, forodesine, is a more potent inhibitor of human lymphocyte proliferation than other previously known PNP inhibitors. Clinical data in our past and ongoing clinical trials, plus extensive preclinical studies indicate that forodesine can modulate T-cell activities. Forodesine is an investigational PNP inhibitor for the potential treatment of T-cell leukemias and T and B cell lymphomas. In February 2006, we licensed forodesine to Mundipharma to develop and commercialize in markets across Europe, Asia and Australia for use in oncology.

During 2002, we exercised the option to add a new compound, BCX-4208, to the series of inhibitors of PNP licensed from AECOM and IRL. Preclinical results indicated that BCX-4208 was a more potent inhibitor than forodesine. We completed a Phase I single ascending dose clinical trial and a Phase Ib multi-dose clinical trial, both in healthy volunteers. In November 2005, we licensed BCX-4208 to Roche for the world wide development and commercialization in autoimmune diseases and transplant rejection. We announced termination of the Roche license in 2008 and have regained world wide rights to BCX-4208.

PNP Inhibitor (forodesine)

Overview

The first clinical trial with an intravenous formulation of forodesine, which began in 2002, was a Phase I clinical trial that enrolled T-ALL patients at the M.D. Anderson Cancer Center in Houston, Texas. Simultaneously, there were preclinical studies being conducted at the M.D. Anderson Cancer Center which indicated that forodesine induces the same biochemical changes in various other types of leukemia cells that are responsible for the inhibition of T-leukemia cells. The results of these preclinical studies led us to expand beyond the single starting trial in T-ALL by initiating additional clinical trials for refractory patients with B-ALL, CTCL, CLL, and other hematologic malignancies. Based on the encouraging results of these initial studies, we are working with our partner, Mundipharma, to develop a strategy for the simultaneous development of forodesine in multiple indications and in potential combination therapies.

Current Development Strategy (T-ALL, CTCL, B-ALL, and CLL)

Forodesine Clinical Development. Following the completion of a Phase I/II clinical trial in patients with refractory 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 a SPA agreement negotiated with the FDA and will serve as a basis for a new drug application to the FDA using the oral formulations in patients with relapsed CTCL. This Phase II clinical study has enrolled all of the targeted patients. We expect to report top line data on this study in the second half of 2010.

Currently, 144 patients are enrolled in the CTCL study. Eligible patients are those with CTCL of stages IB through IVA who have disease that is persistent, progressive or recurrent during or after treatment with at least three systemic therapies. The study is a multinational, non-randomized, open-label, single-arm trial that is evaluating 200 mg once-daily oral forodesine treatment. The study will examine the rate of objective responses in patients enrolled at sites in North America, Europe and Australia. The study s primary endpoint is objective response rate, defined as either complete response or partial cutaneous response that is sustained for at least 28 days.

Table of Contents

Based on preclinical studies conducted at the M.D. Anderson Cancer Center which indicated that forodesine induces the same biochemical changes in various other types of leukemia cells that are responsible for the inhibition of T-leukemia cells, we initiated two small clinical studies late in 2005 in B-cell leukemias, which are more prevalent than T-cell leukemias.

First, we initiated a Phase II trial with oral forodesine in patients with CLL in an advanced stage and refractory to fludarabine, a current standard therapy. Our initial trial has been amended so that any potential subject who had fludarabine treatment in the past is now eligible. This trial is on-going. In December 2008, we announced interim data from the ongoing forodesine Phase II program in patients with CLL and data from a healthy subject pharmacokinetic and pharmacodynamic study. The interim analysis was conducted on data from an exploratory Phase II single-arm, open-label program in patients with CLL whose previous treatment had failed. While this analysis showed that no partial or complete responses were observed, five out of 13 patients administered 200 mg of forodesine once-daily had substantial reductions in malignant lymphocytes, and at the time of the analysis, seven patients were still on study. Forodesine was generally safe and well-tolerated at the 200 mg once-daily dose. Also, in a parallel, healthy subject, pharmacokinetic and pharmacodynamic study, we compared the effect of seven days of 200 mg forodesine dosed once-daily with seven days of 200 mg forodesine dosed twice-daily. The study demonstrated substantially increased drug exposure and pharmacodynamic effect in subjects administered forodesine 200 mg twice-daily. Drug exposure, as measured by area under the (plasma-concentration/time) curve (AUC), increased by 63 percent ($P<0.001$) for twice-daily dosing compared to once-daily dosing. Serum uric acid levels were reduced at steady state compared to baseline by 50.0 percent for twice-daily dosing compared to 23.5 percent for once-daily dosing ($p<0.001$), indicating increased PNP enzyme inhibition with twice-daily dosing. Subsequently, we amended the study to increase the dosing regimen of oral forodesine to 200 mg twice-daily.

This study for forodesine in subjects with CLL has enrolled 20 of the targeted 26 patients, with 15 patients currently still on treatment. The primary purpose of the study is to evaluate the effectiveness and safety of oral forodesine administered as monotherapy at a dose of 200 mg twice-daily in relapsed CLL patients. Previous clinical trial data indicated that forodesine demonstrated clinical activity in CLL patients at a dose of 200 mg once-daily, and was generally safe and well-tolerated. The current trial is testing the benefit and safety of increasing forodesine drug exposure with twice-daily dosing.

We initiated a Phase I/II clinical trial of forodesine to determine the safety of repeat doses of an i.v. formulation of the drug in patients with B-ALL. This trial is completed. Once the data are thoroughly analyzed, we will review the results with Mundipharma to determine the best clinical development strategy going forward.

In January 2007, we initiated a Phase IIb multicenter, open-label, non-randomized repeat-dose registration study to evaluate an intravenous treatment of forodesine followed by an oral treatment of forodesine in patients with relapsed or refractory T-ALL. This study was being conducted under an SPA negotiated with the FDA and was designed to determine the rate of complete remission achieved with forodesine. In March 2007, we announced that as a result of a stability issue with the i.v. formulation, that we were voluntarily placing this Phase IIb clinical trial on hold pending internal review and discussions with our partner, Mundipharma. In December 2007, we announced the formal termination of this study.

In February 2006, we and Mundipharma entered into an exclusive license agreement to develop and commercialize forodesine in markets across Europe, Asia and Australia for use in oncology. The agreement covers a number of markets in Asia and Australasia including Japan, Australia, New Zealand, China and India. This collaboration should help maximize the global development, commercialization, and market potential of forodesine in a variety of serious medical conditions potentially including T-cell leukemia, CTCL, CLL, T-cell non-Hodgkin lymphoma and B-cell non-Hodgkin lymphoma.

PNP Inhibitor (BCX-4208)

Overview

During 2004, we began clinical development of BCX-4208, another PNP inhibitor, as a drug candidate for the treatment of T-cell mediated autoimmune diseases, including psoriasis, and transplant rejection. Although BCX- 4208 and forodesine are both investigational PNP inhibitors, BCX-4208 differs from forodesine in significant ways.

Table of Contents

For example, BCX-4208 is more potent, and has the ability to suppress PNP for longer periods of time. Thus, BCX-4208 has potential advantages over forodesine for the treatment of diseases requiring long-term, chronic administration of a PNP inhibitor.

In November 2005, we and Roche entered into an exclusive license agreement for the worldwide development and commercialization of BCX-4208 for the prevention of acute rejection in transplantation and for the treatment of autoimmune diseases. This collaboration provided substantial strategic and economic benefit to us and also all the essential elements for the rapid, comprehensive and competitive development of BCX-4208. The two companies established a joint committee to set the clinical development strategy and the future development program for BCX-4208.

During the third quarter of 2007, Roche initiated a Phase IIa clinical trial to evaluate BCX-4208/R3421 in patients with moderate to severe plaque psoriasis. In the Phase IIa trial, BCX-4208 was generally safe and well-tolerated at doses up to 120 mg daily for six weeks. Most adverse events reported were considered mild or moderate, and low in frequency. No opportunistic infections were observed. In addition, detailed laboratory and clinical monitoring did not indicate any patterns suggestive of off-target adverse findings. In addition, consistent with interim results previously reported by the Company, no evidence of clinical efficacy, a secondary objective, was observed in psoriasis patients with doses and duration of administration tested. Also in May 2008, we announced that we received notice that Roche was exercising the no cause termination right under the license agreement for BCX-4208.

As a result, we regained worldwide rights to BCX-4208 and are currently pursuing BCX-4208 development in gout. We believe that BCX-4208 is a good candidate to control gout because data from a prior Phase II clinical trial of BCX-4208 for psoriasis indicated a dose related reduction in uric acid that was sustained for the duration of drug exposure.

Current Development Strategy

We completed our initial Phase I study of BCX-4208, a single dose pharmacokinetic trial in healthy volunteers, early in 2005 and during the third quarter of 2005, we initiated a Phase Ib multi dose trial in healthy volunteers to evaluate the safety, tolerability, and pharmacokinetics of multiple oral doses of BCX-4208.

We recently initiated a clinical study of BCX-4208 for the treatment of gout, which is caused by elevated levels of uric acid in blood. Our gout clinical trial is a Phase II, 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.

Neuraminidase Inhibitor

Influenza

Seasonal Influenza. Seasonal influenza, commonly known as the flu, is a viral infection characterized by symptoms including fever, cough, sore throat, fatigue, headache, and/or chills. According to the U.S. Centers for Disease Control and Prevention (CDC), an estimated 5% to 20% of the American population suffers from influenza annually, there are an estimated 200,000 influenza associated hospitalizations, and influenza is responsible for approximately 36,000 deaths annually. Influenza is particularly dangerous to the elderly, young children and people with certain health conditions. Outbreaks of seasonal flu tend to follow predictable patterns usually occurring in the winter. New vaccines are developed annually based on known flu strains and are usually available for the annual flu season. There are also antiviral treatments available for the treatment of people infected with influenza.

Pandemic Influenza. Pandemic influenza is a global disease outbreak that occurs when a new influenza virus emerges and people have had no previous exposure. This situation occurs very rarely (only three times in the 20th century). In May 2009, the World Health Organization (WHO) declared an influenza pandemic caused by a novel influenza virus. According to the WHO, the scientific criteria for an influenza pandemic had been met. According

Table of Contents

to the CDC, H1N1 flu was the most widespread in the United States in late October and early November 2009. October 2009 saw the highest rate of flu illness of any flu season since surveillance began. Children ages 5-17 were most likely to be hospitalized from the H1N1 flu virus. The majority of people who were hospitalized had an underlying condition, with asthma being the most common. Furthermore, the CDC Influenza Division also reported that H1N1 viruses from over 100 countries have been characterized and virtually all of them are similar to the strain of H1N1 included in the 2009 H1N1 flu vaccine. According to the CDC, the H1N1 virus has not changed significantly since it was first recognized in spring 2009 and remains responsive to antiviral treatment.

Avian Influenza. According to information from the CDC, avian influenza, or bird flu is an infection caused by viruses which occur naturally among birds. This form of flu is very contagious among birds and can lead to serious illness and sometimes death. While there are many different subtypes of the influenza A virus, only two subtypes are known to be currently circulating among humans. Avian influenza A viruses are found chiefly in birds, but there have been confirmed cases of infection in humans, generally as a result of contact with infected birds. Thus far, person to person spread of this virus is considered extremely rare, but as influenza A viruses constantly change, they could mutate over time to have the ability to spread rapidly among humans.

Influenza Prevention and Treatment. The development of effective therapeutics has challenged medical researchers due to the seasonal variation in viral strains and the highly infectious nature of influenza. Patients, therefore, have limited treatment options. Amantadine and rimantadine, drugs in the adamantine class, have been used for treatment of influenza A but are ineffective against influenza B. In addition, these drugs cause some adverse side effects, and the virus tends to develop resistance to these drugs. The CDC has recommended against the use of amantadine and rimantadine for the treatment or prophylaxis of influenza in the United States until susceptibility to these antiviral medications has been re-established among circulating influenza A viruses. Osteltamivir and zanamivir, drugs in the neuraminidase inhibitor class, have been used for the treatment of influenza. Recently, the prevalence of resistance to oseltamivir in subtype H1N1 of influenza A has increased, and the CDC has recommended the use of zanamivir or a combination of oseltamivir and rimatadine when influenza A (H1N1) virus infection or exposure is suspected.

Vaccines are available against the disease but have limitations: people require advance vaccination; vaccines are limited by their specificity to particular strains of the virus; and vaccines offer little protection if the strain of influenza that circulates is different from that present in the vaccine. In addition, many people decline the required injections. Different strains can arise when surface antigens on the virus (the portion of the virus that causes an immune reaction in humans) undergo minor genetic mutations each year as the virus replicates (antigenic drift). Because of this mutability, the immunity acquired in response to infection by a particular strain of the virus does not provide adequate protection against viruses that subsequently arise. The production of a new vaccine each year is not only complex and expensive, but also an inefficient method of global disease control.

Inhibiting Influenza Neuraminidase. Research during the past two decades has seen dramatic advances in understanding the molecular structure and function of the influenza virus. Considerable attention has been focused on the enzyme neuraminidase, which is located on the surface of the virus. Neuraminidase assists in the release and spread of the flu virus by breaking the chemical strands that hold the new viruses to the cell surface, allowing the replicated virus to spread and infect other cells. This process progresses until the host s immune response can produce enough antibodies to bring the infection under control. Inhibiting the neuraminidase enzyme keeps new viruses attached to the cell surface, thereby preventing the spread of the virus and the further infection of other cells. The subsequent quantities of virus in the bloodstream are not enough to cause disease but are sufficient to induce the body to mount an immune response.

In addition to our neuraminidase inhibitor drug candidate, peramivir, both Roche, in collaboration with Gilead Sciences, and GlaxoSmithKline (GSK) have neuraminidase inhibitors on the market. Roche s neuraminidase inhibitor is a twice-a-day, orally active neuraminidase inhibitor, while GSK s neuraminidase inhibitor is administered by dry powder inhaler twice a day. Both drugs are approved for marketing in the United States and other countries for treatment of influenza and are to be administered for 5 days. Both companies are have i.v. formulations in clinical trial development. Roche s neuraminidase inhibitor is also approved for prophylaxis of influenza. In addition to these companies with neuraminidase inhibitors, there are other companies working to develop additional antiviral drugs to be used against various strains of influenza.

11

Table of Contents

Some studies in laboratories suggest that some of these neuraminidase inhibitor drugs should work in treating avian influenza infections in humans, but additional studies are needed to demonstrate the effectiveness of these drugs.

Government Stockpiling. With the concern of avian influenza and the possible threat of a pandemic, many governments throughout the world have been stockpiling antiviral drugs, such as Roche s neuraminidase inhibitor, oseltamivir. There is interest in many of these governments, including the U.S. government to find additional vaccines and antivirals to address a potential pandemic situation.

Neuraminidase Inhibitor (peramivir)

Overview

Background. In 1987, scientists at The University of Alabama at Birmingham (UAB), in collaboration with our scientists, began determining the molecular structure of the influenza neuraminidase enzyme from several different strains of influenza, using X-ray crystallography. Subsequently, our scientists and UAB scientists developed numerous new inhibitors of these enzymes using structure-based drug design. We licensed the influenza neuraminidase program from UAB in 1994 and proceeded to complete the studies of the enzyme s molecular structure needed to advance the development of neuraminidase inhibitors. The structure of the active site of influenza neuraminidase is similar among different viral strains. Because of this similarity, we believe that our neuraminidase inhibitors may be effective in the treatment and prevention of influenza, regardless of changes in the virus.

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 clinical trial that had been started by Johnson & Johnson and subsequently terminated development of our oral peramivir program as a result of missing the primary endpoint in the pivotal trial.

Current status of peramivir. We filed an investigational new drug application (IND) in 2005 and re-initiated the clinical development of peramivir during 2006. Currently peramivir i.v. is in Phase III clinical trial development with two Phase III trials underway for the treatment of hospitalized patients with serious influenza.

Current Development Strategy

Preclinical studies comparing peramivir with other anti-influenza drugs have demonstrated that peramivir has broad-spectrum potency against multiple strains of influenza in the nanomolar or sub-nanomolar range, including the avian strain H5N1. We are currently focusing on injectable formulations of peramivir to achieve high blood levels that may be effective against most strains of influenza, including strains that may be resistant to oseltamivir (Tamiflu). Our IND for i.v. peramivir became effective in December 2005 and for i.m. in December 2006. We received fast track designation from the FDA in January 2006 and initiated a Phase I clinical trial with i.v. peramivir in March 2006. During 2006, we conducted multiple Phase I clinical trials in healthy volunteers in preparation for the Phase II trials to be initiated during the 2006-2007 influenza season, which began with the initiation of a Phase II study with the i.m. formulation in January 2007.

Intramuscular peramivir. We completed a double-blind placebo-controlled Phase II clinical trial with i.m. peramivir testing two different dose levels of peramivir (150 mg and 300 mg) versus placebo in adults with acute uncomplicated influenza. While the trial did not demonstrate statistically significant differences for its primary endpoint of time to alleviation of symptoms, the preliminary analysis of the virologic data indicated that peramivir demonstrated statistically significant reductions in influenza virus shedding in both peramivir treatment groups compared to placebo, with greater reductions in the 300 mg dose. With this information and the additional pharmacokinetic information we have obtained subsequent to the trial, we initiated a Phase II placebo-controlled trial of 600 mg i.m. peramivir for the treatment of seasonal influenza. In May 2009, we announced preliminary results from the Phase II study of i.m. peramivir for the treatment of seasonal influenza. This Phase II study was a randomized, double-blind, placebo-controlled trial conducted in influenza seasons in the Southern Hemisphere

Table of Contents

(Australia, New Zealand and South Africa) in 2008 and the Northern Hemisphere (United States) in 2008 to 2009. While the study demonstrated a numerical trend in its primary endpoint of improvement in the median time to TTAS in subjects with confirmed, acute, uncomplicated influenza infection versus placebo, the difference between the two study groups was not statistically significant. We are not planning additional development of i.m. peramivir at this time.

Intravenous peramivir. In July 2007, we announced the initiation of a Phase II clinical trial of i.v. peramivir to compare the efficacy and safety of i.v. peramivir to orally administered oseltamivir in patients who require hospitalization due to acute influenza. This trial was initiated in the Southern Hemisphere and continued in the Northern Hemisphere. On October 27, 2008 the Company announced results of this exploratory Phase II trial. The study compared the efficacy and safety of five days of therapy with either 200 mg i.v. peramivir per day, 400 mg i.v. peramivir per day or 75 mg oral oseltamivir twice a day, in patients who required hospitalization related to influenza. The results were presented at the XI International Symposium on Respiratory Viral Infections in Bangkok, Thailand in February 2009.

The Phase II trial compared the efficacy and safety of five days of therapy with either 200 mg i.v. peramivir per day, 400 mg i.v. peramivir per day or 75 mg oral oseltamivir twice a day for five days, in subjects who required hospitalization related to influenza. The primary objective of the study was to evaluate a novel composite endpoint, time to clinical stability, which is comprised of normalization of temperature, oxygen saturation, respiratory rate, systolic blood pressure and heart rate. Secondary objectives of the study included evaluation of viral shedding, mortality, clinical relapse and time to resumption of usual activities. As reported in October 2008, there were no statistically significant differences in any of the efficacy endpoints between the three treatment arms, and peramivir was generally safe and well-tolerated at those dose levels. Evaluation of time to clinical stability, the primary endpoint, showed a median of 23.7 hours for peramivir 200mg, 37.0 hours for peramivir 400 mg and 28.1 hours for oseltamivir (p=.306). This exploratory endpoint was driven by resolution of fever. Viral shedding (time weighted change from baseline in viral titer) was reduced by a median of -2.0 logs for peramivir 200mg, -2.1 logs for peramivir 400mg, and -1.9 logs for oseltamivir (p=.908). There was no mortality in the primary efficacy population, and there were no clinical relapses. Patients were discharged from the hospital after a median of 4.0 days for peramivir 200 mg, 3,8 days for peramivir 400 mg, and 4.0 days for oseltamivir (p=0.994). The median number of days required for resumption of usual activities was 8.8 days for peramivir 200 mg, 9.0 days for peramivir 400 mg, and 13.7 days for oseltamivir (p=0.276).

In September 2009 we announced the initiation of two Phase III clinical trials of i.v. peramivir for the treatment of hospitalized patients with serious influenza. The combined enrollment target for these studies is approximately 700 patients. Approximately 300 study locations are targeted to participate in these studies globally. These studies are intended to support U.S. regulatory approval of peramivir as a treatment for influenza.

One Phase III 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 influenza. The other Phase III study is an open-label, randomized study of the anti-viral activity, safety and tolerability of i.v. peramivir 600 mg administered once-daily compared with split doses twice-daily for five days in adult and adolescent hospitalized subjects with confirmed or suspected influenza infection.

Shionogi previously completed a Phase II study of i.v. peramivir administered via a single dose infusion in the outpatient setting for treatment of seasonal influenza. Shionogi presented the data at the 2008 ICAAC / IDSA annual meeting in Washington, D.C.

In July 2009, Shionogi announced positive results in two Phase III clinical trials of i.v. peramivir. The studies were sponsored by Shionogi and conducted in Japan, Taiwan and South Korea during the 2008-2009 influenza season. Shionogi and Green Cross Corporation (Green Cross), 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. A total of 1,099 patients were enrolled at 146 centers in Japan, Korea and Taiwan. Both the 300 mg and 600 mg single dose peramivir groups demonstrated non-inferiority for the primary endpoint, TTAS, compared to the

oseltamivir group. The medians for TTAS for the peramivir 300 mg, peramivir 600 mg and oseltamivir groups were 78.0 hrs, 81.0 hrs and 81.8 hrs, respectively. Additionally, Shionogi conducted a double-blind, multi-center Phase III study of i.v. peramivir with dosing over multiple days. The study enrolled 42 influenza patients at high-risk

Table of Contents

of serious complications due to one or more qualifying conditions: diagnosis with poorly controlled diabetes mellitus, a chronic respiratory disease requiring pharmacotherapy, or current treatment with any immunosuppressive drug. Peramivir was administered at 300 mg or 600 mg per day, and the duration was adjusted (up to five days) on a case-by-case basis, depending on the patient s temperature and clinical condition. In this study, the median time to alleviation of symptoms in all 37 evaluable patients treated with either 300 mg or 600 mg peramivir daily was 68.6 hours. Shionogi presented the data at the 2009 ICAAC / IDSA annual meeting in San Francisco, California. Shionogi filed an NDA in Japan for i.v. peramivir in 2009.

Shionogi has commercially launched peramivir under the commercial name RAPIACTA in Japan. Shionogi has received the indications of single dose administration of 300 mg i.v. peramivir for adult uncomplicated seasonal influenza infection, as well as single and multiple dose administration of 600 mg i.v. peramivir for the patients at high-risk for complications associated with influenza. Shionogi is authorized to supply peramivir as either a 300 mg i.v. bag or a 150 mg vial for i.v. drip infusion. Shionogi has completed clinical studies for pediatric patients and has filed an additional application for pediatric use of RAPIACTA in Japan.

Summary. Our plan is to continue developing i.v. peramivir. In addition to the progress made clinically, we have also made significant progress in the manufacturing and toxicology work required to advance the program toward product approval.

Congress approved an appropriation of $3.8 billion for 2006 to support the development of various countermeasures for a flu pandemic. The appropriation included funding for the development of new antiviral agents. In January 2007, we announced that HHS had awarded us a $102.6 million, four-year contract for the advanced development of peramivir for U.S. licensure. In September 2009, we received an award of $77.2 million toward completion of the Phase III development of i.v. peramivir pursuant to a contract modification with HHS. This additional funding brings the total award from HHS for the development of peramivir to $179.9 million and extends the contract term by 12 months to five years. Any funding above the $179.9 million may be our responsibility.

Also in September 2009, we received an RFP from HHS for the supply of i.v. peramivir for the treatment of critically ill influenza patients under an EUA. On November 4, 2009 the Company received an initial order for 10,000 courses of i.v. peramivir (600 mg once-daily for five days) for an aggregate purchase price of $22.5 million and shipped the entire order from existing i.v. peramivir inventory that same day. HHS may place additional orders for peramivir up to a total of 40,000 courses at the same unit price as the first order. In addition to the U.S. Government order that came from the request for proposal (RFP) negotiations, we have donated and transferred to HHS an initial supply sufficient for 1,200 courses of i.v. peramivir 600 mg once-daily for five days. This transfer was made under the development contract with HHS and is separate from the RFP process.

In October 2009, the FDA, in response to a request from the U.S. Centers for Disease Control and Prevention, issued an EUA for i.v. peramivir in certain adult and pediatric patients under specific conditions with confirmed or suspected 2009 H1N1influenza infection who are admitted to a hospital.

In addition to the contract with HHS, we have established collaborative relationships with Shionogi and Green Cross for the development and commercialization in Japan and Taiwan by Shionogi and in Korea by Green Cross. The Shionogi agreement was established in February 2007, which resulted in an upfront payment of $14 million and future clinical event milestone payments of up to $21 million. The Shionogi agreement was amended in 2008 to expand the territory in the agreement to include Taiwan and to provide rights for Shionogi to perform its Phase III clinical trial in Hong Kong. Shionogi recently announced positive results in two Phase III studies of i.v. peramivir administered via a single dose and multiple dose injections in the outpatient setting for treatment of seasonal influenza during the 2008-2009 influenza season. This trial met its primary endpoint of improvement in the median time to alleviation of symptoms in subjects with confirmed, acute, uncomplicated influenza infection, compared to placebo alone.

In addition to Shionogi and Green Cross, we have entered into several agreements with companies outside the U.S. to represent us and peramivir primarily for stockpiling opportunities. For example, on December 23, 2009, we entered into an agreement with Merck Serono, S.A., through its affiliate, Ares Trading S.A., to exclusively represent us and peramivir for stockpiling opportunities in Europe, Russia, Canada and Singapore. Also in December 2009, we entered into an agreement with Hikma Pharmaceuticals, PLC to represent us and peramivir for stockpiling

Table of Contents

opportunities in the Middle East and North Africa, excluding Israel. In January 2010 we entered into an agreement with moksha8 Pharmaceuticals, Inc. to exclusively represent us and peramivir for influenza stockpiling opportunities in Brazil and Mexico.

In addition, we have a binding letter of intent with NT Pharma, Co., Ltd. to exclusively represent us and peramivir for influenza stockpiling opportunities in China. We also have a binding letter of intent with Neopharm Scientific, Ltd. to exclusively represent us and peramivir for influenza stockpiling opportunities in Israel.

Structure-Based Drug Design

Structure-based drug design is a drug discovery approach by which we design synthetic compounds from detailed structural knowledge of the active sites of enzyme targets associated with particular diseases. Enzymes are proteins that act as catalysts for many vital biological reactions. Our goal generally is to design a compound that will fit in the active site of an enzyme (the active site of an enzyme is the area into which a chemical or biological molecule fits to initiate a biochemical reaction) and thereby interfere with the progression of disease.

Our structure-based drug design involves the application of both traditional biology and medicinal chemistry and an array of advanced technologies. We use X-ray crystallography, computer modeling of molecular structures and advanced chemistry techniques to focus on the three-dimensional molecular structure and active site characteristics of the enzymes that control cellular biology.

We believe that structure-based drug design technologies are superior to drug screening techniques. By identifying the target enzyme in advance and by discovering the chemical and molecular structure of the enzyme, we believe it is possible to design a better drug to interact with the enzyme. In addition, the structural data obtained by X-ray crystallographic analysis allow additional analysis and compound modification at each stage of the biological evaluation. This capability makes structure-based drug design a powerful tool for efficient development of drugs that are highly specific for particular enzyme target sites.

Research and Development

We initiated our research and development program in 1986, with drug synthesis beginning in 1987. We have assembled a scientific research staff with expertise in a broad base of advanced research technologies including protein biochemistry, X-ray crystallography, chemistry and pharmacology. Our research facilities include protein biochemistry and organic synthesis laboratories, testing facilities, X-ray crystallography, computer and graphics equipment and facilities to make drug candidates on a small scale for early stage clinical trials. Beginning in June 2006, we began building an internal clinical development and regulatory team, based in North Carolina to manage the development strategy for our later stage products. During the years ended December 31, 2009, 2008, and 2007, our research and development expenses were $72.3 million, $73.3 million, and $94.1 million, respectively.

Collaboration and In-License Relationships

We seek to enter into collaborations with leading pharmaceutical and biotechnology companies when we feel it is advantageous to leverage these companies resources to develop and commercialize our drug candidates on a global basis. This allows us to remain focused on our strength of early stage discovery and development of drug candidates. To date, we have entered into two major collaborations for the development and commercialization of our lead PNP inhibitors and two collaborations for the development and commercialization of peramivir in certain countries outside the U.S. In addition, in January 2007, we announced that HHS had awarded us a $102.6 million, four-year contract for the advanced development of peramivir for U.S. licensure. The total award under this contract is now $179.9 million, and the term has been extended to five years.

Another important component of our strategy is to augment our internal discovery programs through the selective in-licensing of potential drug development targets or early stage compounds for these specific targets. For example, our PNP inhibitors were in-licensed from AECOM and IRL in June 2000.

Table of Contents

Corporate Alliances

Mundipharma. In February 2006, we entered into an exclusive, royalty bearing right and license agreement with Mundipharma for the development and commercialization of our lead PNP inhibitor, forodesine, for use in oncology. Under the terms of the agreement, Mundipharma obtained rights to forodesine in markets across Europe, Asia, and Australasia in exchange for a $10.0 million up-front payment. In addition, Mundipharma contributed $10.0 million of the documented out of pocket development costs incurred by us in respect of the current and planned trials as of the effective date of the agreement and Mundipharma will conduct additional clinical trials at their own cost up to a maximum of $15.0 million. The license provides for possibility of future event payments totaling $155.0 million for achieving specified development, regulatory and commercial events (including certain sales level amounts following a product s launch) for certain indications. In addition, the agreement provides that we will receive royalties (ranging from single digits to mid teens) based on a percentage of net product sales, which varies depending upon when certain indications receive NDA approval in a major market country and can vary by country depending on the patent coverage or sales of generic compounds in a particular country. Generally, all payments under the agreement are nonrefundable and non-creditable, but they are subject to audit. We licensed forodesine and other PNP inhibitors from AECOM and IRL and will owe sublicense payments to these third parties on the upfront payment, event payments, and royalties received by us from Mundipharma.

For five years, Mundipharma will have a right of first negotiation on existing backup PNP inhibitors we develop through Phase IIb in oncology, but any new PNP inhibitors will be exempt from this agreement and we will retain all rights to such compounds. We retained the rights to forodesine in the U.S. and Mundipharma is obligated by the terms of the agreement to use commercially reasonable efforts to develop the licensed product in the territory specified by the agreement. The agreement will continue for the commercial life of the licensed products, but may be terminated by either party following an uncured material breach by the other party or in the event the pre-existing third party license with AECOM and IRL expires. It may be terminated by Mundipharma upon 60 days written notice without cause or under certain other conditions as specified in the agreement and all rights, data, materials, products and other information would be transferred back to us at no cost. In the event we terminate the agreement for material default or insolvency, we could have to pay Mundipharma 50% of the costs of any independent data owned by Mundipharma in accordance with the terms of the agreement.

Shionogi. In March 2007, we entered into an exclusive license agreement with Shionogi to develop and commercialize the Company s lead influenza neuraminidase inhibitor, peramivir, in Japan for the treatment of seasonal and potentially life-threatening human influenza. Under the terms of the agreement, Shionogi obtained rights to injectable formulations of peramivir in Japan in exchange for a $14 million up-front payment. The license provides for potential future milestone event payments (up to $21 million) and commercial event milestone payments (up to $95 million) in addition to double digit (between 10 and 20% range) royalty payments on product sales of peramivir. In December 2007, the Company received a $7 million milestone payment from Shionogi for their initiation of a Phase II clinical trial with i.v. peramivir. Generally, all payments under the agreement are nonrefundable and non-creditable, but they are subject to audit. Shionogi will be responsible for all development, regulatory and marketing costs in Japan. The term of the agreement is from February 28, 2007 until terminated by either party in accordance with the license agreement. Either party may terminate in the event of an uncured breach. Shionogi has the right of without cause termination. In the event of termination all license and rights granted to Shionogi shall terminate and shall revert back to the Company. The Company developed peramivir under a license from UAB and will owe sublicense payments to them on the upfront payment and any future event payments and/or royalties received by the Company from Shionogi. In October 2008, we and Shionogi amended the license agreement to expand the territory covered by the agreement to include Taiwan and to provide rights for Shionogi to perform a Phase III Clinical Trial in Hong Kong. Shionogi announced positive results in two Phase III studies in July 2009 and received marketing and manufacturing approval for i.v. peramivir in Japan in January 2010. This marketing approval triggered a third and final regulatory milestone payment to us of $7.0 million in January 2010.

Green Cross. In June 2006, we entered into an agreement with Green Cross to develop and commercialize peramivir in Korea. Under the terms of the agreement, Green Cross will be responsible for all development, regulatory, and commercialization costs in Korea. We received a one-time license fee of $250,000. Total future

milestone payments would be equally modest. The license also provides that we will share in profits resulting from the sale of peramivir in Korea, including the sale of peramivir to the Korean government for stockpiling purposes. Furthermore, Green Cross will pay us a premium over its cost to supply peramivir for development and any future marketing of peramivir products in Korea. Both parties have the right to terminate in the event of an uncured

Table of Contents

material breach. In the event of termination all rights, data, materials, products and other information would be transferred to us. Green Cross filed a New Drug Application for i.v. peramivir in South Korea in Jaunary 2010.

Roche. In November 2005, we entered into an exclusive license with Roche for the development and commercialization of our second generation PNP inhibitor, BCX-4208, for the prevention of acute rejection in transplantation and for the treatment of autoimmune diseases. Under the terms of the agreement, Roche obtained worldwide rights to BCX-4208 in exchange for an up-front payment of $30 million, which included a payment as reimbursement for a limited supply of material during the first 24 months of the collaboration. The license also provided for future milestone event payments for achieving specified development, regulatory and commercial milestones (including sales level milestones following a product s launch) for certain indications.

In May 2008 the Company received notice that Roche was exercising the no cause termination right under the license agreement for BCX-4208. Upon termination during the fourth quarter of 2008, the Company recognized the remaining deferred revenue and deferred expense related to the license agreement, which were $26.5 million and $8.2 million, respectively.

Academic Alliances

Albert Einstein College of Medicine of Yeshiva University and Industrial Research, Ltd, New Zealand (AECOM and IRL respectively) In June 2000, we licensed a series of potent inhibitors of PNP from AECOM and IRL. The lead drug candidates from this collaboration are forodesine and BCX-4208. We have obtained worldwide exclusive rights to develop and ultimately distribute these compounds or any other drug candidates that might arise from research on these inhibitors. We have the option to expand the Agreement to include other inventions in the field made by the investigators or employees of AECOM and IRL. We have agreed to use commercially reasonable efforts to develop these drugs. In addition, we have agreed to pay certain milestone payments for each licensed product (which range in the aggregate from $1.4 million to almost $4 million per indication) for future development of these inhibitors, single digit royalties on net sales of any resulting product made by us, and to share approximately one quarter of future payments received from other third-party partners, if any. In addition, we have agreed to pay annual license fees that can range from $150,000 to $500,000 depending on stage of development of products that are non-refundable, but are creditable against actual royalties and other payments due to AECOM and IRL. This agreement may be terminated by us at any time by giving 60 days advance notice or in the event of material uncured breach by AECOM and/or IRL.

The University of Alabama at Birmingham (UAB). We have had a close relationship with UAB since our formation. Our former Chairman, Dr. Charles E. Bugg, was the previous Director of the UAB Center for Macromolecular Crystallography, and our former Chief Operating Officer, Dr. J. Claude Bennett, was the former President of UAB, the former Chairman of the Department of Medicine at UAB and a former Chairman of the Department of Microbiology at UAB. Several of our early programs originated at UAB.

We currently have agreements with UAB for influenza neuraminidase and complement inhibitors. Under the terms of these agreements, UAB performed specific research for us in return for research payments and license fees. UAB has granted us certain rights to any discoveries in these areas resulting from research developed by UAB or jointly developed with us. We have agreed to pay single digit royalties on sales of any resulting product and to share in future payments received from other third-party partners. We have completed the research under both the complement and influenza agreements. These two agreements have initial 25-year terms, are automatically renewable for five-year terms throughout the life of the last patent and are terminable by us upon three months notice and by UAB under certain circumstances. Upon termination each party shall cease using the other party s proprietary and confidential information and materials, the parties shall jointly own joint inventions and UAB shall resume full ownership of all UAB licensed products. There is currently no activity between us and UAB on these agreements, but when the Company licenses this technology, such as in the case of the Shionogi and Green Cross agreements, or commercialize products related to these programs, we will owe sublicense fees or royalties on amounts we receive.

Emory University (Emory). In June 2000, we licensed intellectual property from Emory related to the HCV polymerase target associated with hepatitis C viral infections. Under the original terms of the agreement, the research investigators from Emory provided us with materials and technical insight into the target. We have agreed to pay Emory single digit royalties on sales of any resulting product and to share in future payments received from other third

party partners, if any. We can terminate this agreement at any time by giving 90 days advance notice. Upon termination, we would cease using the licensed technology.

Table of Contents

Government Contracts

In January 2007, we announced that HHS had awarded us a $102.6 million, four-year contract for the advanced development of peramivir. In September 2009, we received an award of $77.2 million toward completion of the Phase III development of i.v. peramivir pursuant to a recent contract modification with HHS. This additional funding brings the total award from HHS for the development of peramivir to $179.9 million and extends the contract term by 12 months to five years. Any funding above the $179.9 million may be our responsibility.

This contract is a milestone-driven, cost-plus-fixed-fee contract. HHS will make periodic assessments of our progress, and the continuation of the contract is based on our performance, the timeliness and quality of deliverables, and other factors. The government has rights under certain contract clauses to terminate this contract. The contract is terminable by the government at any time for breach or without cause.

On November 4, 2009, we received an initial order from HHS under the RFP for 10,000 courses of i.v. peramivir and shipped the entire order from existing i.v. peramivir inventory on the same day. Under the Indefinite Delivery Indefinite Quantity contract issued to us on November 3, 2009, HHS may place additional orders for peramivir up to a total of 40,000 courses at the same unit price as the first order. In addition to the U.S. Government order that came from the RFP, we have donated and transferred to HHS an initial supply sufficient for 1,200 courses of i.v. peramivir. This transfer was made under the development contract with HHS and is separate from the RFP process.

HHS has indicated that antiviral drugs are an important element of their pandemic influenza preparedness efforts and that their strategy includes not only stockpiling of existing antiviral drugs but also seeking out new antiviral medications to further broaden their capabilities to treat and prevent all forms of influenza. Peramivir is in the same class of neuraminidase inhibitors as oseltamivir (Tamiflu) and zanamivir (Relenza). We are committed to working with HHS for the development of these parenteral formulations of peramivir which could be especially useful in hospital settings or pandemic situations due to the ability to achieve high levels of the drug rapidly throughout the body.

Patents and Proprietary Information

Our success will depend in part on our ability to obtain and enforce patent protection for our products, methods, processes and other proprietary technologies, preserve our trade secrets, and operate without infringing on the proprietary rights of other parties, both in the United States and in other countries. We own or have rights to certain proprietary information, proprietary technology, issued and allowed patents and patent applications which relate to compounds we are developing. We actively seek, when appropriate, protection for our products, proprietary technology and proprietary information by means of U.S. and foreign patents, trademarks and contractual arrangements. In addition, we rely upon trade secrets and contractual arrangements to protect certain of our proprietary information, proprietary technology and products.

The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. Our ability to maintain and solidify our proprietary position for our technology will depend on our success in obtaining effective patent claims and enforcing those claims once granted. We do not know whether any of our patent applications or those patent applications that we license will result in the issuance of any patents. Our issued patents and those that may issue in the future, or those licensed to us, may be challenged, invalidated, rendered unenforceable or circumvented, which could limit our ability to stop competitors from marketing related products or the length of term of patent protection that we may have for our products. In addition, the rights granted under any issued patents may not provide us with competitive advantages against competitors with similar compounds or technology. Furthermore, our competitors may independently develop similar technologies or duplicate any technology developed by us in a manner that does not infringe our patents or other intellectual property. Because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that, before any of our drug candidates or those developed by our partners can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of the patent.

As of February 28, 2010, we have been issued 18 U.S. patents that expire between 2015 and 2025 and that relate to our PNP, serine protease and neuraminidase inhibitor compounds. We have licensed six different class of

Table of Contents

compounds representing new composition of matter patents from AECOM and IRL for our PNP inhibitors, plus additional manufacturing patents related to these PNP inhibitors and one patent from Emory related to hepatitis C. Additionally, we have 20 PCT or U.S. patent applications pending related to PNP, neuraminidase, RNA or DNA polymerase, Janus Kinase and serine protease inhibitors. Our pending applications may not result in issued patents, and our patents may not provide us with sufficient protection against competitive products or otherwise be commercially viable.

Our success is also dependent upon the skills, knowledge and experience of our scientific and technical personnel, none of which is patentable. To help protect our rights, we require all employees, consultants, advisors and partners to enter into confidentiality agreements, which prohibit the disclosure of confidential information to anyone outside of our company and, where possible, requires 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.

Marketing and Sales

We may decide to market, distribute and sell products within specialty markets for use in treatment of various diseases. Our general strategy is to maximize sustainable value by moving our drug candidate portfolio through clinical development, registration and ultimately to the market. We believe that this is best achieved by retaining full product rights to certain drug candidates within specialty markets, while relying on collaborative arrangements with third parties for drug candidates within larger markets or outside our area of expertise. However, in general, we lack experience in marketing, distributing and selling pharmaceutical products. Our strategy includes relying on partners, licensees or arrangements with others to provide for the marketing, distribution and sales of products we may develop. We may not be able to establish and maintain acceptable commercial arrangements with partners, licensees or others to perform such activities.

Competition

The pharmaceutical and biotechnology industries are intensely competitive. Many companies, including biotechnology, chemical and pharmaceutical companies, are actively engaged in activities similar to ours, including research and development of drugs for the treatment of cancer, infectious, autoimmune, and inflammatory disorders. Many of these companies have substantially greater financial and other resources, larger research and development staffs, and more extensive marketing and manufacturing organizations than we do. In addition, some of them have considerable experience in preclinical testing, clinical trials and other regulatory approval procedures. There are also academic institutions, governmental agencies and other research organizations that are conducting research in areas in which we are working. They may also market commercial products, either on their own or through collaborative efforts.

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 is the case with Eisai s Targretin for CTCL and the current neuraminidase inhibitors marketed by GSK and Roche for influenza. In addition, several pharmaceutical and biotechnology firms, including major pharmaceutical companies, have announced efforts in the field of structure-based drug design and in the therapeutic areas of cancer, infectious disease, autoimmune, and inflammatory disorders, as well as other therapeutic areas where we are focusing our drug discovery efforts.

In order to compete successfully, we must develop proprietary positions in patented drugs for therapeutic markets that have not been satisfactorily addressed by conventional research strategies and, in the process, expand our expertise in structure-based drug design. Our products, even if successfully tested and developed, may not be adopted by physicians over other products and may not offer economically feasible alternatives to other therapies.

Government Regulation

The FDA regulates the pharmaceutical and biotechnology industries in the U.S., and our drug candidates are subject to extensive and rigorous domestic government regulations prior to commercialization. The FDA regulates, among other things, the development, testing, manufacture, safety, efficacy, record-keeping, labeling, storage,

Table of Contents

approval, advertising, promotion, sale and distribution of pharmaceutical products. In foreign countries, our products are also subject to extensive regulation by foreign governments. These government regulations will be a significant factor in the production and marketing of any pharmaceutical products that we develop. Failure to comply with applicable FDA and other regulatory requirements at any stage during the regulatory process may subject us to sanctions, including:

- delays;
- warning letters;
- fines;
- product recalls or seizures;
- injunctions;
- penalties;
- refusal of the FDA to review pending market approval applications or supplements to approval applications;
- total or partial suspension of production;
- civil penalties;
- withdrawals of previously approved marketing applications; and
- criminal prosecutions.

The regulatory review and approval process is lengthy, expensive and uncertain. Before obtaining regulatory approvals for the commercial sale of any products, we or our partners must demonstrate that our product candidates are safe and effective for use in humans. The approval process takes many years, substantial expenses may be incurred and significant time may be devoted to clinical development.

Before testing potential candidates in humans, we carry out laboratory and animal studies to determine safety and biological activity. After completing preclinical trials, we must file an IND, including a proposal to begin clinical trials, with the FDA. We have filed thirteen INDs to date and plan to file, or rely on future partners to file, additional INDs in the future as our potential drug candidates advance to that stage of development. Thirty days after filing an IND, a Phase I human clinical trial can start, unless the FDA places a hold on the study.

Our Phase I trials are designed to determine safety in a small group of patients or healthy volunteers. We also assess tolerances and the metabolic and pharmacologic actions of our drug candidates at different doses. After we complete the initial trials, we conduct Phase II trials to assess safety and efficacy and establish the optimal dose in patients. If Phase II trials are successful, we or our partners conduct Phase III trials to verify the results in a larger patient population. Phase III trials are required for FDA approval to market a drug. A Phase III trial may require hundreds or even thousands of patients and is the most expensive to conduct. The goal in Phase III is to collect enough safety and efficacy data to obtain FDA approval of a drug for treatment of a particular disease. For some clinical indications that are especially serious and for which there are no effective treatments, such as refractory cancers, conditional approval can be obtained following Phase II trials.

Initiation and completion of the clinical trial phases are dependent on several factors including things that are beyond our control. For example, the clinical trials cannot begin at a particular site until that site receives approval from its Institutional Review Board (IRB), which reviews the protocol and related documents. This process can take from several weeks to several months. In addition, clinical trials are dependent on patient enrollment, but the rate at which patients enroll in the study depends on:

willingness of investigators to participate in a study;

ability of clinical sites to obtain approval from their IRB;

Table of Contents

the availability of the required number of eligible subjects to be enrolled in a given trial;

the availability of existing or other experimental drugs for the disease we intend to treat;

the willingness of patients to participate; and

the patients meeting the eligibility criteria.

Delays in planned patient enrollment may result in increased expense and longer development timelines.

After completion of the clinical trials of a product, we or our partners must submit a NDA to the FDA for marketing approval before commercialization of the product. The FDA may not grant approval on a timely basis, if at all. The FDA, as a result of the Food and Drug Administration Modernization Act of 1997, has six months to review and act upon license applications for priority therapeutics that are for life-threatening or unmet medical needs. Standard reviews can take between one and two years, and can even take longer if significant questions arise during the review process. The FDA may withdraw any required approvals, once obtained.

In addition to clinical development regulations, we and our contract manufacturers and partners must comply with the applicable FDA current good manufacturing practice (GMP) regulations. GMP regulations include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation. Manufacturing facilities are subject to inspection by the FDA. Such facilities must be approved before we can use them in commercial manufacturing of our potential products. We or our contract manufacturers may not be able to comply with the applicable GMP requirements and other FDA regulatory requirements. If we or our contract manufacturers fail to comply, our business, financial condition and results of operations will be materially adversely affected.

Human Resources

As of February 28, 2010, we had 79 employees, of whom 56 were engaged in research and development and 23 were in general and administrative functions. Our research and development staff, 23 of whom hold Ph.D. or M.D. degrees, have diversified experience in biochemistry, pharmacology, X-ray crystallography, synthetic organic chemistry, computational chemistry, and medicinal chemistry, clinical development and regulatory affairs. We consider our relations with our employees to be satisfactory.

Financial Information

For information related to our revenues, profits, net loss and total assets, in addition to other financial information, please refer to the Financial Statement and Notes to Financial Statements contained in this Annual Report.

Available Information

We have available a website on the Internet. Our address is www.biocryst.com. We make available, free of charge, at our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. We also make available at our website copies of our audit committee charter, compensation committee charter, corporate governance and nominating committee charter and our code of business conduct, which applies to all our employees as well as the members of our Board of Directors. Any amendment to, or waiver from, our code of business conduct will be posted on our website.

ITEM 1A. RISK FACTORS

An investment in our stock involves risks. You should consider carefully the following uncertainties and risks, which may adversely affect our business, financial condition or results of operations, along with all of the other

Table of Contents

information included in our other filings with the Securities and Exchange Commission, 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 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.

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

Table of Contents

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 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, we may be at a disadvantage as compared to other commercial contracts. In addition, U.S. government contracts are subject to audit and

Table of Contents

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. We also have obligations with HHS under the Indefinite Delivery Indefinite Quantity contract issued in November 2009. 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 contracts 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 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;

Table of Contents

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;

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.

Table of Contents

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 (cGLP), current Good Manufacturing Practices (cGMP) and current Good Clinical Practices (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.

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 peramivir i.v. currently in clinical development may not prove to be safe and sufficiently effective for market approval in the United States or other major markets;
- 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;

Table of Contents

advances in flu vaccines or other antivirals, including competitive i.v. antivirals, could substantially replace potential demand for peramivir;

any substantial demand for pandemic or seasonal flu treatments may occur before peramivir can be adequately developed and tested in clinical trials;

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 us. 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 additional 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 us. The sale of peramivir, emergency use or other use of peramivir in any country may create certain liabilities for us.

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;

Table of Contents

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 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.

Table of Contents

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.

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 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.

29

Table of Contents

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 (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 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;

Table of Contents

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;

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

31

Table of Contents

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 unpexcted 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.

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 December 31, 2009, the 52-week range of the market price of our stock was from $1.15 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;

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;

Table of Contents

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.

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.

Information Regarding Forward-Looking Statements

This filing contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, which are subject to the safe harbor created in Section 21E. All statements other than statements of historical facts contained in this filing, are forward-looking statements. These forward-looking statements can generally be identified by the use of words such as may, will, intends, plans, believes, anticipate expects, estimates, predicts, potential, the negative of these words or similar expressions. Statements that describe o future plans, strategies, intentions, expectations, objectives, goals or prospects are also forward-looking statements. Discussions containing these forward-looking statements are principally contained in Business, Risk Factors and Management s Discussion and Analysis of Financial Condition and Results of Operations , as well as any amendments we make to those sections in filings with the SEC. 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;

Table of Contents

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. 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.

Table of Contents

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We lease offices in both Birmingham, Alabama and Durham, North Carolina. Our principal research facilities are located in Birmingham, while our clinical and regulatory operations are primarily based in Durham. We believe that our facilities are adequate for our current operations.

ITEM 3. LEGAL PROCEEDINGS

None.

ITEM 4. (REMOVED AND RESERVED)

Table of Contents

PART II

ITEM 5. MARKET FOR REGISTRANT S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock trades on the NASDAQ Global Market[SM] under the symbol BCRX. The following table sets forth the low and high sales prices of our common stock as reported by NASDAQ Global Market[SM] for each quarter in 2009 and 2008:

	2009		2008	
	Low	High	Low	High
First quarter	$ 1.15	$ 2.37	$ 2.81	$ 6.53
Second quarter	1.65	4.99	2.58	4.98
Third quarter	3.65	13.47	2.40	3.60
Fourth quarter	5.55	12.70	.85	3.18

The last sale price of the common stock on March 1, 2010 as reported by NASDAQ Global Market[SM] was $6.68 per share.

Holders

As of March 1, 2010, there were approximately 230 holders of record of our common stock.

Dividends

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

Table of Contents

Stock Performance Graph

This performance graph is not soliciting material, is not deemed filed with the SEC and is not to be incorporated by reference in any filing by us under the Securities Act of 1933, as amended (the Securities Act), or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing. The stock price performance shown on the graph is not necessarily indicative of future price performance.

PERFORMANCE GRAPH FOR BIOCRYST
Indexed Comparison Since 2004

	Beginning Investment 12/31/04	Investment at 12/31/05	Investment at 12/31/06	Investment at 12/31/07	Investment at 12/31/08	Investment at 12/31/09
BioCryst Pharmaceuticals, Inc.	$ 100.00	$ 289.79	$ 200.00	$ 106.92	$ 23.70	$ 111.76
The NASDAQ Stock Market	100.00	102.13	112.20	121.67	58.64	84.28
NASDAQ Pharmaceutical Stocks	100.00	110.12	107.79	113.35	105.47	118.52

The above graph measures the change in a $100 investment in our common stock based on its closing price of $5.78 on December 31, 2004 and its year-end closing price thereafter. Our relative performance is then compared with the CRSP Total Return Indexes for the NASDAQ Stock Market (U.S.) and NASDAQ Pharmaceutical Stocks.

Recent Sales of Unregistered Securities

None.

Table of Contents

Issuer Purchases of Equity Securities

The following table contains information about repurchases of our common stock or shares surrendered to satisfy tax obligations during the fourth quarter of 2009:

Period	Total Number of Shares Purchased[1]	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs
October 2009		$		
November 2009				
December 2009	24,072	6.46		
Total	24,072			

(1) Amounts represent shares of common stock delivered to us as payment of withholding taxes due on the vesting of restricted stock issued under our Stock Incentive Plan.

Table of Contents

ITEM 6. SELECTED FINANCIAL DATA

	Years Ended December 31, (In thousands, except per share data)				
	2009	2008	2007	2006	2005
Statement of Operations Data:					
Total revenues	$ 74,589	$ 56,561	$ 71,238	$ 6,212	$ 152
Research and development expenses	72,301	73,327	94,052	47,083	23,642
Net loss	(13,452)	(24,732)	(29,055)	(43,618)	(26,099)
Amounts per common share:					
Basic and diluted net loss per share	$ (0.35)	$ (0.65)	$ (0.89)	$ (1.50)	$ (1.01)
Weighted average shares outstanding	38,926	38,062	32,771	29,147	25,721

	As of December 31, (In thousands)				
	2009	2008	2007	2006	2005
Balance Sheet Data:					
Cash, cash equivalents and securities	$ 94,259	$ 63,314	$ 85,009	$ 46,236	$ 59,988
Total assets	142,190	84,692	142,717	68,485	99,248
Long-term deferred revenue	18,441	20,937	49,694	36,596	29,426
Accumulated deficit	(262,719)	(249,268)	(224,536)	(195,481)	(151,863)
Total stockholders equity	86,266	46,426	64,905	21,155	58,440

Table of Contents

ITEM 7. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Annual Report on Form 10-K contains certain statements of a forward-looking nature relating to future events or the future financial performance of BioCryst. Such statements are only predictions and the actual events or results may differ materially from the results discussed in the forward-looking statements. Factors that could cause or contribute to such differences include those discussed below as well as those discussed in other filings made by BioCryst with the Securities and Exchange Commission.

The following Management s Discussion and Analysis (MD&A) is intended to help the reader understand our results of operations and financial condition. MD&A is provided as a supplement to, and should be read in conjunction with, our audited Financial Statements and the accompanying notes to the financial statements and other disclosures included in this Annual Report on Form 10-K (including the disclosures under Item 1A. Risk Factors).

Overview

2009 Corporate Highlights

Peramivir

In January 2007, HHS awarded us a $102.6 million, four-year contract for the advanced development of peramivir. In September 2009, we received an award of $77.2 million toward completion of the Phase III development of i.v. peramivir pursuant to a contract modification with HHS. This additional funding brings the total award from HHS for the development of peramivir to $179.9 million and extends the contract term by 12 months to five years. Any funding above the $179.9 million may be our responsibility.

We have determined that there is an excess of up to $5.0 million of peramivir active pharmaceutical ingredient (API) manufactured under the contract with HHS. This excess API is beyond the amount necessary to support U.S. regulatory approval. HHS has acknowledged that at least half of the Company s estimate is excess. We are evaluating whether additional quantities of peramivir API are needed by the Company, and if so, the acquisition process to obtain the API from HHS.

In September 2009, we received a RFP from HHS for the supply of i.v. peramivir for the treatment of critically ill influenza patients under an Emergency Use Authorization (EUA). On November 4, 2009 we received an initial order for 10,000 courses of i.v. peramivir (600 mg once-daily for five days) for an aggregate purchase price of $22.5 million. We shipped the entire order from existing i.v. peramivir inventory to HHS on November 4, 2009. Under the Indefinite Delivery Indefinite Quantity contract issued to us on November 3, 2009, HHS may place additional orders for peramivir up to a total of 40,000 courses at the same unit price as the first order. We are also required to maintain the ability to manufacture additional treatment courses dependent on the volume and size of anti-viral orders received from HHS. In addition, separate from the RFP process, we have donated and transferred to HHS an initial supply sufficient for 1,200 courses of i.v. peramivir 600 mg once-daily for five days.

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 130,000 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 API of i.v. peramivir available to produce up to 350,000 additional courses.

In October 2009, the FDA, in response to a request from the U.S. Centers for Disease Control and Prevention, issued an EUA for 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.

Table of Contents

In addition to the contract with HHS, in February 2007, we established a collaborative relationship with Shionogi for the development and commercialization of peramivir in Japan. We received an upfront payment of $14 million and the agreement provided for additional future clinical event milestone payments of up to $21 million. In October 2008, we and Shionogi amended the license agreement to expand the territory in the agreement to include Taiwan and to provide rights for Shionogi to perform a Phase III clinical trial in Hong Kong.

In July 2009, Shionogi announced positive results in two Phase III clinical trials of i.v. peramivir. The studies were sponsored by Shionogi and conducted during the 2008-2009 influenza season. Shionogi and Green Cross Corporation (Green Cross), 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. Shionogi presented the data at the 2009 ICAAC / IDSA annual meeting in San Francisco, California.

Shionogi previously completed a Phase II study of i.v. peramivir administered via a single dose infusion in the outpatient setting for treatment of seasonal influenza. Shionogi presented the data at the 2008 ICAAC / IDSA annual meeting in Washington, D.C.

In January 2010, Shionogi received marketing and manufacturing approval for i.v. peramivir in Japan. The filing of this application triggered a $7.0 million milestone payment to us under our current license agreement, and we received a third and final regulatory milestone payment of $7.0 million in January 2010 as a result of the application s approval. We may receive future commercial event milestone payments of up to $95 million from Shionogi. Shionogi has commercially launched peramivir under the commercial name RAPIACTA in Japan. Shionogi has received the indications of single dose administration of 300 mg i.v. peramivir for adult uncomplicated seasonal influenza infection, as well as single and multiple dose administration of 600 mg i.v. peramivir for the patients at high-risk for complications associated with influenza. Shionogi is authorized to supply peramivir as either a 300 mg i.v. bag or a 150 mg vial for i.v. drip infusion. Shionogi also announced that it has completed clinical studies for pediatric patients and has filed an additional application for pediatric use of RAPIACTA in Japan.

Additionally, in January 2010, Green Cross filed a New Drug Application in South Korea in January 2010 to seek regulatory approval for i.v. peramivir to treat patients with influenza.

In addition to Shionogi and Green Cross, we have entered into several agreements with companies outside the U.S. to represent us and peramivir primarily for stockpiling opportunities. For example, on December 23, 2009, we entered into an agreement with Merck Serono, S.A., through its affiliate, Ares Trading S.A., to exclusively represent us and peramivir for stockpiling opportunities in Europe, Russia, Canada and Singapore. Also in December 2009, we entered into an agreement with Hikma Pharmaceuticals, PLC to represent us and peramivir for stockpiling opportunities in the Middle East and North Africa, excluding Israel. In January, 2010 we entered into an agreement with moksha8 Pharmaceuticals, Inc. to exclusively represent us and peramivir for influenza stockpiling opportunities in Brazil and Mexico.

Intramuscular peramivir. We completed a double-blind placebo-controlled Phase II clinical trial with i.m. peramivir testing two different dose levels of peramivir (150 mg and 300 mg) versus placebo in adults with acute uncomplicated influenza. While the trial did not demonstrate statistically significant differences for its primary endpoint of time to alleviation of symptoms, the preliminary analysis of the virologic data indicated that peramivir demonstrated statistically significant reductions in influenza virus shedding in both peramivir treatment groups compared to placebo, with greater reductions in the 300 mg dose. With this information and the additional pharmacokinetic information we have obtained subsequent to the trial, we initiated a Phase II placebo-controlled trial of 600 mg i.m. peramivir for the treatment of seasonal influenza. In May 2009, we announced preliminary results from the Phase II study of i.m. peramivir for the treatment of seasonal influenza. This Phase II study was a randomized, double-blind, placebo-controlled trial conducted in influenza seasons in the Southern Hemisphere (Australia, New Zealand and South Africa) in 2008 and the Northern Hemisphere (United States) in 2008 to 2009. While the study demonstrated a numerical trend in its primary endpoint of improvement in the median time to alleviation of symptoms (TTAS) in subjects with confirmed, acute, uncomplicated influenza infection versus placebo, the difference between the two study groups was not statistically significant. We are not planning additional development of i.m. peramivir at this time.

41

Table of Contents

Intravenous peramivir. In July 2007, we initiated a Phase II clinical trial of i.v. peramivir to compare the efficacy and safety of i.v. peramivir to orally administered oseltamivir in patients who require hospitalization due to acute influenza.

The primary objective of the study was to evaluate time to clinical stability, which is a composite endpoint comprised of normalization of temperature, oxygen saturation, respiratory rate, systolic blood pressure and heart rate. This type of endpoint has previously been used in pneumonia studies, but not in influenza. Secondary objectives of the study included evaluation of viral shedding, mortality, clinical relapse and time to resumption of usual activities. We presented the results at the XI International Symposium on Respiratory Viral Infection being held in Bangkok, Thailand in February 2009.

In September 2009 we announced that we are initiating two Phase III studies of i.v. peramivir for the treatment of hospitalized patients with serious influenza. The combined enrollment target for these studies is approximately 700 patients, and approximately 300 study locations are targeted to participate in these studies globally. These studies are intended to support U.S. regulatory approval of i.v. peramivir as a treatment for influenza.

Forodesine

An oral formulation of forodesine is currently in a pivotal trial for 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 an NDA to the FDA using the oral formulation in patients with relapsed CTCL. In January 2010, we announced that we had achieved our protocol-specific objective of enrolling 100 late-stage patients (Stage IIB to IVA) in this pivotal study. We expect to report top-line data on this study in the second half of 2010.

Long-term data from our Phase II study of forodesine in patients with CTCL was presented at the 45th Annual Meeting of the American Society of Clinical Oncology. This poster presentation reviewed the safety and efficacy of forodesine for CTCL patients of stage Ib to stage IV who have failed standard therapies and received forodesine treatment for greater than 12 months.

In December 2008, we announced interim data from the ongoing forodesine Phase II program in patients with CLL and data from a healthy subject pharmacokinetic and pharmacodynamic study. Top-line study results are expected in the second half of 2010.

BCX-4208

During the third quarter of 2007, Roche initiated a Phase IIa clinical trial to evaluate oral doses of BCX-4208/R3421 in patients with moderate to severe plaque psoriasis. The efficacy assessment of the study has been completed. Consistent with interim findings reported by us in May 2008, the Phase II clinical study of BCX-4208, a potent, rationally designed, orally available PNP inhibitor, met its primary objectives of safety and tolerability. In addition, BCX-4208 displayed dose-dependent reductions in peripheral blood lymphocyte counts, including subsets measuring B cells (CD20), total T cells (CD3), T helper cells (CD4) and T suppressor/cytotoxic cells (CD8). Further, plasma levels of BCX-4208 increased with dose, and plasma uric acid levels showed dose-related reductions with BCX-4208. In addition, consistent with interim results previously reported by us, no evidence of clinical efficacy, a secondary objective, was observed in psoriasis patients with doses and duration of administration tested.

In the Phase IIa trial, BCX-4208 was generally safe and well-tolerated at doses up to 120 mg daily for six (6) weeks. Most adverse events reported were considered mild or moderate, and low in frequency. No opportunistic infections were observed. In addition, detailed laboratory and clinical monitoring did not indicate any patterns suggestive of off-target adverse findings.

Also in May 2008, we received notice that Roche was exercising the no cause termination right under the license agreement for BCX-4208. As a result, we regained worldwide rights to BCX-4208.

We recently initiated a clinical study 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

Table of Contents

II clinical trial of BCX-4208 for psoriasis indicated a dose related to reduction in uric acid that was sustained for the duration of drug exposure. Our gout clinical trial is a Phase II, 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.

Results of Operations

Year Ended December 31, 2009 Compared with the Year Ended December 31, 2008

Total revenues increased to $74.6 million for the year ended December 31, 2009 as compared to $56.6 million for the year ended December 31, 2008. This increase was driven by $22.9 million in product sales, primarily the $22.5 million order of 10,000 courses of i.v. peramivir from HHS, as well as a $7.0 million milestone payment from our partner, Shionogi, related to its filing of an NDA to seek regulatory approval for i.v. peramivir in Japan. In addition, revenue from the contract with HHS for the development of peramivir increased by $16.3 million during the current year as two global Phase III studies were initiated. These increases were offset by lower amortization of deferred revenue from our collaborative arrangements. Specifically, $27.8 million of previously deferred revenue was recognized during the prior year as Roche terminated its collaboration with us in 2008.

Cost of product sales for the year ended December 31, 2009 were approximately $4.5 million. Included in cost of product sales is a $4.0 million provision for peramivir finished goods inventory. We expense costs related to the production of inventories as research and development expenses in the period incurred until such time it is believed that future economic benefit is expected to be recognized, which generally is reliant upon receipt of regulatory approval. Upon regulatory approval, we capitalize subsequent costs related to the production of inventories. We determined that the FDA s granting of the EUA for peramivir in October 2009 was objective and persuasive evidence that supported capitalization of peramivir inventories manufactured after the issuance of the EUA. As a result, we recorded manufacturing costs of $4.0 million for peramivir finished goods inventory. However, in preparing our December 31, 2009 financial statements, we evaluated whether the costs capitalized as inventory would be recoverable in a future period. Given the lack of objective, reliable evidence to support future demand for peramivir, we concluded that there was no certainty that future sales would materialize and revenues would exceed the costs incurred. Therefore, the capitalized inventory was fully reserved.

The remaining amounts included in cost of product sales for the year ended December 31, 2009 relate to components, secondary packaging, and royalties and commissions paid to third parties as a result of the peramivir product sales. No costs for the manufacturing of the peramivir finished goods were included in cost of product sales, as the manufacturing was completed prior to the issuance of the EUA.

Until we sell the inventory for which costs were previously expensed, our cost of product sales will reflect only incremental costs incurred subsequent to the issuance of the EUA in October 2009. As such, if we sell that portion of our existing inventory, there will be a period of time where revenue could be recognized with little or no corresponding cost. Therefore, we anticipate that the gross margin on future product sales, if any, will fluctuate and not be comparable from quarter to quarter.

Research and development expenses decreased to $72.3 million for 2009 from $73.3 million for the prior year due to reductions of $1.3 million in clinical development costs, $3.8 million in manufacturing costs, and $0.4 million in toxicology costs for the forodesine program, as well as lower costs of $2.0 million related to our pre-clinical compounds and $1.4 million in general operating and personnel related costs. In addition, $8.6 million of previously deferred expense was recognized during the prior year as Roche terminated its collaboration with us in 2008. These decreases were offset by higher clinical development costs of $7.5 million for peramivir and $1.5 million for BCX-4208, as well as an increase of $6.3 million in manufacturing and $1.5 million in consulting fees for the peramivir program.

General and administrative expenses increased to $11.5 million for 2009 from $10.4 million for 2008. This increase was primarily due to higher legal and consulting fees.

Table of Contents

Interest income for 2009 was $0.3 million as compared to $2.4 million for the prior year, due to a lower average cash and securities balance as well as significantly lower yield earned on interest-bearing assets.

The net loss for the year ended December 31, 2009 was $13.5 million, or $0.35 per share, compared to a net loss of $24.7 million, or $0.65 per share for the year ended December 31, 2008.

Year Ended December 31, 2008 Compared with the Year Ended December 31, 2007

Collaborative and other research and development revenues were $56.6 million for the year ended December 31, 2008, compared to $71.2 million for the year ended December 31, 2007. This decrease was partially driven by a reduction of $33.7 million in revenue from the contract with HHS for the development of peramivir. During the second quarter of 2008, we recorded a $4.9 million charge to revenues for amounts that were denied reimbursement by HHS related to costs incurred in the Phase III program of i.m. peramivir for outpatient influenza. We initiated this program and voluntarily discontinued it following a decision to pursue higher doses in the ongoing Phase II study. Reimbursement of these costs is under discussion with HHS. Further contributing to the decrease in collaborative and other R&D revenues from 2007 to 2008 was the receipt of a $7.0 million milestone payment from Shionogi in 2007. This was offset by the recognition of $26.5 million of previously deferred revenue related to the termination of our collaboration with Roche in the fourth quarter of 2008.

Research and development expenses were $73.3 million for the year ended December 31, 2008, compared to $94.1 million for the year ended December 31, 2007. The decrease in R&D expenses was due to a reduction in the clinical development costs of $16.3 million and toxicology costs of $1.6 million associated with the peramivir program, a reduction in manufacturing costs of $10.3 million and $6.4 million associated with the peramivir and forodesine programs, respectively, and a reduction in costs incurred on our pre-clinical compounds of $0.9 million. These reductions were offset by an increase in our clinical development costs of $2.6 million for forodesine, the recognition of $8.2 million of previously deferred expense related to the termination of our collaboration with Roche, and increases of $4.2 million in personnel related costs, consulting fees, and operating costs.

General and administrative expenses were $10.4 million for the year ended December 31, 2008, compared to $9.5 million for the year ended December 31, 2007. The higher expenses were primarily due to increases in professional fees and operating costs.

The net loss for the year ended December 31, 2008 was $24.7 million, or $0.65 per share, compared to a net loss for the year ended December 31, 2007 of $29.1 million, or $0.89 per share.

Liquidity and Capital Resources

Cash expenditures have exceeded revenues since our inception. Our operations have principally been funded through public offerings and private placements of equity securities and cash from collaborative and other research and development agreements, including government contracts. For example, during 2009, we closed a registered offering of 5,000,000 shares of our common stock at a public offering price of $9.75 per share, resulting in proceeds net of offering costs of $45.7 million, and received cash from our collaborative partners (primarily HHS, Mundipharma, and Shionogi) of approximately $51.7 million. In addition, during the fourth quarter of 2009, we received $22.5 million from HHS as a result of the peramivir stockpiling order. Other sources of funding have included the following:

other collaborative and other research and development agreements;

government grants;

equipment lease financing;

facility leases;

research grants; and

Table of Contents

interest income.

We have attempted to contain costs and reduce cash flow requirements by renting scientific equipment and facilities, contracting with other parties to conduct certain research and development and using consultants. We expect to incur additional expenses, potentially resulting in significant losses, as we continue to pursue our research and development activities in general and specifically related to our clinical trial activity. We also expect to incur substantial expenses related to the filing, prosecution, maintenance, defense and enforcement of patent and other intellectual property claims and additional regulatory costs as our clinical products advance through later stages of development.

The objective of our investment policy is to ensure the safety and preservation of invested funds, as well as maintaining liquidity sufficient to meet cash flow requirements. We place our excess cash with high credit quality financial institutions, commercial companies, and government agencies in order to limit the amount of our credit exposure. We have not realized any significant losses from investments.

During 2009 and 2008, we incurred capital costs of approximately $0.6 million and $1.2 million, respectively. In 2007, we incurred capital costs of approximately $3.3 million. Included in 2007 capital costs were amounts related to a renovation of our facility to build additional laboratory space.

At December 31, 2009, we had long-term operating lease obligations, which provide for aggregate minimum payments of approximately $565,000 in 2010, $854,000 in 2011, and $871,000 in 2012. These obligations include the future rental of our operating facilities.

We plan to finance our needs principally from the following:

payments under our contract with HHS;

our existing capital resources and interest earned on that capital;

payments under collaborative and licensing agreements with corporate partners; and

lease or loan financing and future public or private financing.

For the year, our cash, cash equivalents, and marketable securities balance has increased from $63.3 million as of December 31, 2008 to $94.3 million as of December 31, 2009. Excluding the $45.7 million registered offering and the $22.5 million received from HHS for peramivir stockpiling, our net cash burn for 2009 was $37.2 million, or $3.1 million per month. During the third quarter of 2009, we had announced that our net cash use for 2009 would be near the top end of the previous guidance range of $30.0 to $38.0 million. For 2010, we expect that cash use will be between $25.0 and $30.0 million. Our cash use will vary depending on clinical outcomes and could vary significantly from our expectations depending on the timing of Company expenses and the related reimbursement from our collaborators.

As our clinical programs continue to progress 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 the continuing 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 and timing 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.

With the funds available at December 31, 2009 and future amounts that are expected to be received from HHS, Shionogi, and our other collaborators, we believe these resources will be sufficient to fund our operations for at least

Table of Contents

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:

- our ability to perform under the contract with HHS and receive reimbursement;
- 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 a decision to build or expand internal development and commercial capabilities;
- 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 engage sites and enroll subjects 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 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 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 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.

Off-Balance Sheet Arrangements

As part of our ongoing business, we do not participate in transactions that generate relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities (SPEs), which would have been established for the purpose of facilitating off-balance sheet

Table of Contents

arrangements or other contractually narrow or limited purposes. As of December 31, 2009, we are not involved in any material unconsolidated SPE or off-balance sheet arrangements.

Contractual Obligations

In the table below, we set forth our enforceable and legally binding obligations and future commitments and obligations related to all contracts that we are likely to continue regardless of the fact that they are cancelable as of December 31, 2009. Some of the amounts we include in this table are based on management s estimates and assumptions about these obligations, including their duration, the possibility of renewal, anticipated actions by third parties, and other factors. Because these estimates and assumptions are necessarily subjective, the obligations we will actually pay in future periods may vary from those reflected in the table.

	Payments due by period				
Contractual Obligations	**Total**	**Less than 1 year**	**1-3 years**	**3-5 years**	**More than 5 years**
Operating Lease Obligations	$ 4,349,863	$ 565,357	$ 1,725,003	$ 1,771,073	$ 288,430
Purchase Obligations (1)	36,856,315	36,856,315			
Total	$ 41,206,178	$ 37,421,672	$ 1,725,003	$ 1,771,073	$ 288,430

(1) Purchase obligations include commitments related to clinical development, manufacturing and research operations and other purchase commitments.

In addition to the above, we have committed to make potential future sublicense payments to third-parties as part of in-licensing and development programs. Payments under these agreements generally become due and payable only upon achievement of certain developmental, regulatory and/or commercial milestones. Because the achievement of these milestones is neither probable nor reasonably estimable, such contingencies have not been recorded on our balance sheet.

Critical Accounting Policies

We have established various accounting policies that govern the application of accounting principles generally accepted in the United States, which were utilized in the preparation of our financial statements. Certain accounting policies involve significant judgments and assumptions by management that have a material impact on the carrying value of certain assets and liabilities. Management considers such accounting policies to be critical accounting policies. The judgments and assumptions used by management are based on historical experience and other factors, which are believed to be reasonable under the circumstances. Because of the nature of the judgments and assumptions made by management, actual results could differ from these judgments and estimates, which could have a material impact on the carrying values of assets and liabilities and the results of operations.

While our significant accounting policies are more fully described in Note 1 to our financial statements included in this Annual Report on Form 10-K for the year ended December 31, 2009, we believe that the following accounting policies are the most critical to aid you in fully understanding and evaluating our reported financial results and affect

the more significant judgments and estimates that we use in the preparation of our financial statements.

Accrued Expenses

As part of the process of preparing financial statements, we are required to estimate accrued expenses. This process involves reviewing open contracts and purchase orders, communicating with our applicable personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual cost. The majority of our service providers invoice us monthly in arrears for services performed. We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. To date, there have been no material changes to our estimates. Examples of estimated accrued expenses include:

Table of Contents

fees paid to contract research organizations in connection with preclinical and toxicology studies and clinical trials;

fees paid to investigative sites in connection with clinical trials;

fees paid to contract manufacturers in connection with the production of our raw materials, drug substance and drug products; and

professional service fees.

We base our expenses related to clinical trials on our estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and clinical research organizations that conduct and manage clinical trials on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we will adjust the accrual accordingly. To date, there have been no material changes to our estimates. If we do not identify costs that we have begun to incur or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates.

Revenue Recognition

Prior to the fourth quarter of 2009, our revenues have generally been limited to license fees, event payments, research and development fees, government contracts, and interest income. Revenue from license fees, event payments, and research and development fees are recognized as revenue when the earnings process is complete and we have no further continuing performance obligations or we have completed the performance obligations under the terms of the agreement. Fees received under licensing agreements that are related to future performance are deferred and recognized as earned over an estimated period determined by management based on the terms of the agreement and the products licensed. In the event a license agreement contains multiple deliverables, we evaluate whether the deliverables are separate or combined units of accounting. Revisions to revenue or profit estimates as a result of changes in the estimated revenue period are recognized prospectively.

Reimbursements received for direct out-of-pocket expenses related to research and development costs are recorded as revenue in the income statement rather than as a reduction in expenses. Event payments are recognized as revenue upon the achievement of specified events if (1) the event is substantive in nature and the achievement of the event was not reasonably assured at the inception of the agreement and (2) the fees are non-refundable and non-creditable. Any event payments received prior to satisfying these criteria are recorded as deferred revenue. Under our contract with HHS, revenue is recognized as reimbursable direct and indirect costs are incurred.

During the fourth quarter of 2009, we recognized revenues related to product sales of peramivir. Sales are recognized when products are shipped, title and risk of loss have passed, and collectability is reasonably assured. We did not provide a right of product return in conjunction with the sales of peramivir during 2009.

Research and Development Expenses

Our research and development costs are charged to expense when incurred. Advance payments for goods or services that will be used or rendered for future research and development activities are deferred and capitalized. Such amounts are recognized as expense when the related goods are delivered or the related services are performed. Research and development expenses include, among other items, personnel costs, including salaries and benefits, manufacturing costs, clinical, regulatory, and toxicology services performed by contract research organizations (CROs), materials and supplies, and overhead allocations consisting of various administrative and facilities related costs. Most of our manufacturing and clinical and preclinical studies are performed by third-party CROs. Costs for studies performed by CROs are accrued by us over the service periods specified in the contracts and estimates are adjusted, if required, based upon our on-going review of the level of services actually performed.

Table of Contents

Additionally, we have license agreements with third parties, such as AECOM, IRL, and UAB, which require fees related to sublicense agreements or maintenance fees. We expense sublicense payments as incurred unless they are related to revenues that have been deferred, in which case the expenses are deferred and recognized over the related revenue recognition period. We expense maintenance payments as incurred.

At December 31, 2009, we had deferred collaboration expenses of approximately $3.0 million. These deferred expenses were sub-license payments, paid to our academic partners upon receipt of consideration from various commercial partners. These deferred expenses would not have been incurred without receipt of such payments from our commercial partners and are being expensed in proportion to the related revenue being recognized. We believe that this accounting treatment appropriately matches expenses with the associated revenue.

We group our R&D expenses into two major categories: direct external expenses and all other R&D expenses. Direct external expenses consist of costs of outside parties to conduct laboratory studies, to develop manufacturing processes and manufacture the product candidate, to conduct and manage clinical trials and similar costs related to our clinical and preclinical studies. These costs are accumulated and tracked by program. All other R&D expenses consist of costs to compensate personnel, to purchase lab supplies and services, to maintain our facility, equipment and overhead and similar costs of our research and development efforts. These costs apply to work on our clinical and preclinical candidates as well as our discovery research efforts. These costs have not been charged directly to each program historically because the number of product candidates and projects in research and development may vary from period to period and because we utilize internal resources across multiple projects at the same time.

The following table summarizes our R&D expenses for the periods indicated (amounts in millions):

	Year ended December 31,		
	2009	2008	2007
Direct external R&D expenses by program:			
PNP Inhibitor (forodesine)	$ 10.3	$ 15.9	$ 19.4
Neuraminidase Inhibitor (peramivir)	36.8	21.5	50.3
PNP Inhibitor (BCX-4208)	2.5	9.0	0.2
Other		2.1	3.5
All other R&D expenses:			
Compensation and fringe benefits	12.3	12.9	11.4
Supplies and services	1.2	2.9	1.9
Maintenance, depreciation, and amortization	2.0	2.2	1.4
Overhead allocation and other	7.2	6.8	6.0
Direct external R&D expenses by program:	$ 72.3	$ 73.3	$ 94.1

At this time, due to the risks inherent in the clinical trial process and given the stages of our various product development programs, we are unable to estimate with any certainty the costs we will incur in the continued development of our drug candidates for potential commercialization. While we are currently focused on advancing each of our development programs, our future R&D expenses will depend on the determinations we make as to the scientific and clinical success of each drug candidate, as well as ongoing assessments as to each drug candidate s commercial potential. As such, we are unable to predict how we will allocate available resources among our product development programs in the future. In addition, we cannot forecast with any degree of certainty the development progress of our existing partnerships for our drug candidates, which drug candidates will be subject to future collaborations, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements.

The successful development of our drug candidates is uncertain and subject to a number of risks. We cannot be certain that any of our drug candidates will prove to be safe and effective or will meet all of the applicable regulatory

requirements needed to receive and maintain marketing approval. Data from preclinical studies and clinical trials are susceptible to varying interpretations that could delay, limit or prevent regulatory clearance. We, the FDA, or other regulatory authorities may suspend clinical trials at any time if we or they believe that the subjects participating in such trials are being exposed to unacceptable risks or if such regulatory agencies find deficiencies in the conduct of the trials or other problems with our products under development. Delays or rejections may be encountered based on additional governmental regulation, legislation, administrative action or changes in FDA or

Table of Contents

other regulatory policy during development or the review process. Other risks associated with our product development programs are described in Risk Factors in Part I, Item 1A of this Annual Report on Form 10-K, as updated from time to time in our subsequent periodic reports and current reports filed with the SEC. Due to these uncertainties, accurate and meaningful estimates of the ultimate cost to bring a product to market, the timing of completion of any of our product development programs and the period in which material net cash inflows from any of our product development programs will commence are unavailable.

Stock-Based Compensation

All share-based payments, including grants of stock option awards and restricted stock awards, are recognized in our income statement based on their fair values. Stock-based compensation cost is estimated at the grant date based on the fair value of the award and is recognized as expense on a straight-line basis over the requisite service period of the award. Determining the appropriate fair value model and the related assumptions for the model requires judgment, including estimating the life of an award, the stock price volatility, and the expected term.

Recent Accounting Pronouncements

Note 12 to the Financial Statements included in Item 8 of this Annual Report on Form 10-K discusses new accounting pronouncements adopted by the Company during 2009 as well as accounting pronouncements recently issued or proposed but not yet required to be adopted.

7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

The objective of our investment policy is to ensure the safety and preservation of invested funds, as well as maintaining liquidity sufficient to meet cash flow requirements. We place our excess cash with high credit quality financial institutions, commercial companies, and government agencies in order to limit the amount of credit exposure. Some of the securities we invest in may have market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate. To minimize this risk, we schedule our investments to have maturities that coincide with our expected cash flow needs, thus avoiding the need to redeem an investment prior to its maturity date. Accordingly, we do not believe that we have material exposure to interest rate risk arising from our investments. Generally, our investments are not collateralized. We have not realized any significant losses from our investments.

Table of Contents

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

BioCryst Pharmaceuticals, Inc.

BALANCE SHEETS

	December 31, 2009	December 31, 2008
Assets		
Cash and cash equivalents	$ 41,124,937	$ 22,342,058
Restricted cash	625,000	
Marketable securities	27,838,812	39,186,404
Receivables from collaborations	33,722,207	11,982,430
Inventories	6,281,263	
Prepaid expenses and other current assets	1,055,712	1,136,842
Deferred collaboration expense	374,221	376,972
Total current assets	111,022,152	75,024,706
Marketable securities	24,670,060	1,786,034
Furniture and equipment, net	3,871,653	4,880,475
Deferred collaboration expense	2,626,241	3,000,462
Total assets	$ 142,190,106	$ 84,691,677
Liabilities and Stockholders Equity		
Accounts payable	$ 18,069,767	$ 5,265,947
Accrued expenses	15,794,800	8,442,398
Accrued vacation	839,362	794,375
Deferred rent	52,537	40,000
Deferred collaboration revenue	2,496,534	2,565,285
Total current liabilities	37,253,000	17,108,005
Deferred rent	230,145	220,000
Deferred collaboration revenue	18,440,911	20,937,445
Stockholders equity:		
Preferred stock: shares authorized 5,000,000 Series B Junior Participating Preferred stock, $.001 par value; shares authorized 95,000; shares issued and outstanding none		
Common stock, $.01 par value; shares authorized 95,000,000; shares issued and outstanding 43,906,831 in 2009 and 38,275,167 in 2008	439,068	382,751
Additional paid-in capital	348,571,914	295,207,583
Accumulated other comprehensive (loss) income	(25,783)	103,507
Accumulated deficit	(262,719,149)	(249,267,614)
Total stockholders equity	86,266,050	46,426,227
Total liabilities and stockholders equity	$ 142,190,106	$ 84,691,677

See accompanying notes to financial statements.

Table of Contents

BioCryst Pharmaceuticals, Inc.
STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2009	**2008**	**2007**
Revenues			
Product sales	$ 22,922,508	$	$
Collaborative and other research and development	51,666,811	56,561,369	71,237,901
Total revenues	74,589,319	56,561,369	71,237,901
Expenses			
Cost of products sold	4,543,914		
Research and development	72,301,442	73,326,634	94,051,996
General and administrative	11,481,187	10,399,227	9,465,962
Total expenses	88,326,543	83,725,861	103,517,958
Loss from operations	(13,737,224)	(27,164,492)	(32,280,057)
Interest and other income	285,689	2,432,922	3,224,533
Net loss	$ (13,451,535)	$ (24,731,570)	$ (29,055,524)
Basic and diluted net loss per common share	$ (0.35)	$ (0.65)	$ (0.89)
Weighted average shares outstanding	38,925,525	38,062,131	32,770,923

See accompanying notes to financial statements.

Table of Contents

BioCryst Pharmaceuticals, Inc.
STATEMENTS OF STOCKHOLDERS EQUITY

	Common Stock	Additional Paid-in Capital	Accumulated Other Comprehensive (Loss) Income	Accumulated Deficit	Total Stock-holders Equity	Comprehensive Loss
Balance at December 31, 2006	$ **292,488**	$ **216,310,578**	$ **32,463**	$ **(195,480,520)**	$ **21,155,009**	
Net loss				(29,055,524)	(29,055,524)	$ (29,055,524)
Unrealized gain on marketable securities available-for-sale			345,594		345,594	345,594
Comprehensive loss						$ (28,709,930)
Issue of restricted common stock, 60,000 shares	600	(600)				
Sale of common stock, 8,315,513 shares, net	83,155	65,034,937			65,118,092	
Exercise of stock options, 308,037 shares, net	3,080	1,378,098			1,381,178	
Employee stock purchase plan sales, 34,855 shares	349	269,328			269,677	
Stock-based compensation expense		5,691,028			5,691,028	
Balance at December 31, 2007	**379,672**	**288,683,369**	**378,057**	**(224,536,044)**	**64,905,054**	
Net loss				(24,731,570)	(24,731,570)	$ (24,731,570)
Unrealized loss on marketable securities available-for-sale			(274,550)		(274,550)	(274,550)
Comprehensive loss						$ (25,006,120)
Issue of restricted common stock, 76,536 shares	765	(765)				
Exercise of stock options, 146,470 shares, net	1,465	397,634			399,099	
	849	266,691			267,540	

Employee stock purchase plan sales, 84,907 shares						
Stock-based compensation expense		5,860,654			5,860,654	
Balance at December 31, 2008	**382,751**	**295,207,583**	**103,507**	**(249,267,614)**	**46,426,227**	
Net loss				(13,451,535)	(13,451,535)	$ (13,451,535)
Unrealized loss on marketable securities available-for-sale			(129,290)		(129,290)	(129,290)
Comprehensive loss						$ (13,580,825)
Exercise of stock options, 532,379 shares, net	5,324	2,111,676			2,117,000	
Sale of common stock, 5,000,000 shares, net	50,000	45,690,190			45,740,190	
Employee stock purchase plan sales, 123,357 shares	1,234	192,846			194,080	
Purchases of treasury stock, 24,072 shares	(241)	(155,264)			(155,505)	
Stock-based compensation expense		5,524,883			5,524,883	
Balance at December 31, 2009	**$ 439,068**	**$ 348,571,914**	**$ (25,783)**	**$ (262,719,149)**	**$ 86,266,050**	

See accompanying notes to financial statements.

Table of Contents

BioCryst Pharmaceuticals, Inc.
STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2009	**2008**	**2007**
Operating activities			
Net loss	$ (13,451,535)	$ (24,731,570)	$ (29,055,524)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation, amortization, and impairment	1,612,514	1,625,878	1,369,713
Stock-based compensation expense	5,524,883	5,860,654	5,691,028
Changes in operating assets and liabilities:			
Receivables from collaborations	(21,739,777)	27,145,246	(34,571,531)
Inventories	(6,281,263)		
Prepaid expenses and other current assets	81,130	(188,402)	(274,682)
Deferred collaboration expense	376,972	8,960,709	1,361,824
Accounts payable and accrued expenses	20,201,209	(8,956,613)	15,424,180
Deferred rent	22,682	260,000	
Deferred collaboration revenue	(2,565,285)	(30,849,722)	15,057,193
Net cash used in operating activities	**(16,218,470)**	**(20,873,820)**	**(24,997,799)**
Investing activities			
Acquisitions of furniture and equipment	(603,692)	(1,212,274)	(3,343,827)
Change in restricted cash	(625,000)		
Purchases of marketable securities	(54,103,222)	(124,459,834)	(62,907,146)
Sales and maturities of marketable securities	42,437,498	137,066,027	51,217,617
Net cash (used in) provided by investing activities	**(12,894,416)**	**11,393,919**	**(15,033,356)**
Financing activities			
Sale of common stock, net of issuance costs	45,740,190		65,118,092
Exercise of stock options	2,117,000	399,099	1,381,178
Employee stock purchase plan sales	194,080	267,540	269,677
Purchases of treasury stock	(155,505)		
Net cash provided by financing activities	**47,895,765**	**666,639**	**66,768,947**
Increase (decrease) in cash and cash equivalents	18,782,879	(8,813,262)	26,737,792
Cash and cash equivalents at beginning of year	22,342,058	31,155,320	4,417,528
Cash and cash equivalents at end of year	**$ 41,124,937**	**$ 22,342,058**	**$ 31,155,320**

See accompanying notes to financial statements.

Table of Contents

BioCryst Pharmaceuticals, Inc.
NOTES TO FINANCIAL STATEMENTS

Note 1 Significant Accounting Policies

The Company

BioCryst Pharmaceuticals, Inc. (the Company) is a biotechnology company that designs, optimizes, and develops novel small-molecule pharmaceuticals that block key enzymes involved in infectious diseases, cancer, and inflammatory diseases. The Company has progressed two novel compounds into late-stage pivotal clinical trials; peramivir, an anti-viral for influenza, and forodesine, a purine nucleoside phosphorylase (PNP) inhibitor for cutaneous T-cell lymphoma (CTCL). Utilizing crystallography and structure-based drug design, the Company continues to discover additional compounds and to progress others through pre-clinical and early development to address the unmet medical needs of patients and physicians.

Basis of Presentation

The Company s financial statements have been prepared in accordance with accounting principles generally accepted in the United States. Such financial statements reflect all adjustments that are, in management s opinion, necessary to present fairly, in all material respects, the Company s financial position, results of operations, and cash flows. There were no adjustments other than normal recurring adjustments.

Cash and Cash Equivalents

The Company generally considers cash equivalents to be all cash held in commercial checking accounts, money market accounts or investments in debt instruments with maturities of three months or less at the time of purchase.

Restricted Cash

During 2009, the Company initiated a new corporate card program. As a result, the Company was required to place $625,000 into an interest bearing money market account to serve as collateral for the program.

Marketable Securities

The objective of the Company s investment policy is to ensure the safety and preservation of invested funds, as well as maintaining liquidity sufficient to meet cash flow requirements. The Company places its excess cash with high credit quality financial institutions, commercial companies, and government agencies in order to limit the amount of credit exposure. Some of the securities the Company invests in may have market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate. To minimize this risk, the Company schedules its investments with maturities that coincide with expected cash flow needs, thus avoiding the need to redeem an investment prior to its maturity date. Accordingly, the Company does not believe that it has a material exposure to interest rate risk arising from its investments. Generally, the Company s investments are not collateralized. The Company has not realized any significant losses from its investments.

The Company classifies all of its marketable securities as available-for-sale. Unrealized gains and losses on securities available-for-sale are recognized in other comprehensive income, unless an unrealized loss is considered to be other than temporary, in which case the unrealized loss is charged to operations. The Company periodically reviews its securities available-for-sale for other than temporary declines in fair value below cost basis and whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. At December 31, 2009, the Company believes that the costs of its securities are recoverable in all material respects.

Table of Contents

The following tables summarize the fair value of the Company s securities by type at December 31, 2009. The estimated fair value of the Company s securities was based on independent quoted market prices and represents the highest priority of Level 1 in the fair value hierarchy as defined in generally accepted accounting principles.

	Amortized Cost	Accrued Interest	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. Treasury securities	$ 21,757,640	$ 35,603	$ 19,103	$ (17,500)	$ 21,794,846
Obligations of U.S. government agencies	14,544,257	67,919	9,755	(9,915)	14,612,016
Corporate debt securities	10,635,360	106,851	7,852	(35,361)	10,714,702
Commercial paper	4,090,727		1,285	(455)	4,091,557
Municipal obligations	1,293,956	2,342		(547)	1,295,751
Total marketable securities	$ 52,321,940	$ 212,715	$ 37,995	$ (63,778)	$ 52,508,872

At December 31, 2008, the Company had $40,972,438 of marketable securities, all of which were classified as available-for-sale. These securities consisted of U.S. Treasury bills and notes carried at estimated fair value. The estimated fair value of these securities was based on independent quoted market prices. At December 31, 2008, the amortized cost of securities available-for-sale, including accrued interest, was $40,868,931. At December 31, 2008, gross unrealized gains on securities available-for-sale were $103,507. There were no gross unrealized losses on securities available-for-sale at December 31, 2008.

During 2008, in an effort to minimize investment risk in light of the unstable economic environment, the Company sold two securities previously classified as held-to-maturity. The carrying amount of these securities was $3,469,506, which represented amortized cost. The proceeds from the sale of these securities was $3,458,814.

The following table summarizes the scheduled maturity for the Company s securities available-for-sale at December 31, 2009 and 2008.

	2009	2008
Maturing in one year or less	$ 27,838,812	$ 39,186,404
Maturing after one year through two years	19,819,148	1,786,034
Maturing after two years	4,850,912	
Total marketable securities	$ 52,508,872	$ 40,972,438

Receivables from Collaborations

Receivables are recorded for amounts due to the Company primarily related to reimbursable research and development costs. These receivables are evaluated to determine if any reserve or allowance should be established at each reporting date. At December 31, 2009, the Company had the following receivables from collaborations.

	Billed	Unbilled	Total
U.S. Department of Health and Human Services	$ 11,521,378	$ 18,673,947	$ 30,195,325
Shionogi & Co. Ltd.	1,344,040		1,344,040
Mundipharma	1,065,000	692,824	1,757,824
Other	425,018		425,018
Total receivables from collaborations	$ 14,355,436	$ 19,366,771	$ 33,722,207

Included in receivables from the U.S. Department of Health and Human Services (HHS) is $5,828,384 related to indirect cost rate adjustments for 2007, 2008, and 2009. These adjustments are calculated as the difference between the actual indirect costs incurred against the contract during a calendar year and the indirect costs that are invoiced at a provisional billing rate during the calendar year. Because these adjustment amounts represent actual costs incurred in performance of the contract and the costs are allowable, reasonable, and allocable to the contract, the Company has recorded revenue accordingly. The Company s calculations of its indirect cost rates are subject to an audit by the federal government. The Company does not anticipate receiving payment for these indirect cost rate adjustments until those audits have been completed.

Table of Contents

Inventories

Inventories are stated at the lower of cost, determined under the first-in, first-out (FIFO) method, or market. At December 31, 2009, inventories consisted of the following:

Supplies	$ 1,187,415
Raw materials	5,093,848
Finished goods	3,968,406
Reserve for finished goods	(3,968,406)
Total inventories	$ 6,281,263

The supplies held on hand as of December 31, 2009 are related to peramivir manufacturing supplies (vials, stoppers, and seals) that are unused and have an alternative future use should sales of peramivir fail to materialize. The raw materials on hand as of December 31, 2009 are related to bulk peramivir active pharmaceutical ingredient (API) manufactured for Shionogi & Co., Ltd. (Shionogi) and shipped by the Company subsequent to year-end.

The Company expenses costs related to the production of inventories as research and development expenses in the period incurred until such time it is believed that future economic benefit is expected to be recognized, which generally is reliant upon receipt of regulatory approval. Upon regulatory approval, the Company capitalizes subsequent costs related to the production of inventories.

The Company determined that the FDA s granting of the Emergency Use Authorization (EUA) for peramivir in October 2009 was objective and persuasive evidence that supported capitalization of peramivir inventories manufactured after the issuance of the EUA. As a result, the Company recorded manufacturing costs of $3,968,406 for peramivir finished goods inventory. Prior to the issuance of the EUA, all costs associated with the manufacturing of peramivir were expensed as research and development expenses.

In preparing the Company s December 31, 2009 financial statements, the Company evaluated whether the costs capitalized as inventory would be recoverable in a future period. Given the lack of objective, reliable evidence to support future demand for peramivir, management concluded that there was no certainty that future sales will materialize and revenues will exceed the costs incurred. Therefore, the capitalized inventory was fully reserved. This reserve was charged to cost of products sold within the Company s Statements of Operations.

Furniture and Equipment

Furniture and equipment are recorded at cost. Depreciation is computed using the straight-line method with estimated useful lives of five and seven years. Laboratory equipment, office equipment, and software are depreciated over a life of five years. Furniture and fixtures are depreciated over a life of seven years. Leasehold improvements are amortized over their estimated useful lives or the remaining lease term, whichever is less.

In accordance with generally accepted accounting principles, the Company periodically reviews its furniture and equipment for impairment when events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Determination of recoverability is based on an estimate of undiscounted future cash flows resulting from the use of the asset and its eventual disposition. In the event that such cash flows are not expected to be sufficient to recover the carrying amount of the assets, the assets are written down to their estimated fair values. Furniture and equipment to be disposed of are reported at the lower of carrying amount or fair value less cost to sell.

Patents and Licenses

The Company seeks patent protection on all internally developed processes and products. All patent related costs are expensed to general and administrative expenses as incurred, as recoverability of such expenditures is uncertain.

Accrued Expenses

Table of Contents

The Company records all expenses in the period incurred. In addition to recording expenses for invoices received, the Company estimates the cost of services provided by third parties or materials purchased for which no invoices have been received as of the balance sheet dates. Accrued expenses as of December 31, 2009 and 2008 consisted primarily of development and clinical trial expenses payable to contract research organizations in connection with the Company s research and development programs.

Income Taxes

The liability method is used in the Company s accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse.

Accumulated Other Comprehensive (Loss) Income

Accumulated other comprehensive (loss) income is comprised of unrealized gains and losses on securities available-for-sale and is disclosed as a separate component of stockholders equity.

Revenue Recognition

Prior to the fourth quarter of 2009, the Company s revenues have generally been limited to license fees, event payments, research and development fees, government contracts, and interest income. Revenue from license fees, event payments, and research and development fees are recognized as revenue when the earnings process is complete and the Company has no further continuing performance obligations or the Company has completed the performance obligations under the terms of the agreement. Fees received under licensing agreements that are related to future performance are deferred and recognized over an estimated period determined by management based on the terms of the agreement and the products licensed. In the event a license agreement contains multiple deliverables, the Company evaluates whether the deliverables are separate or combined units of accounting. Revisions to revenue or profit estimates as a result of changes in the estimated revenue period are recognized prospectively.

Reimbursements received for direct out-of-pocket expenses related to research and development costs are recorded as revenue in the income statement rather than as a reduction in expenses. Event payments are recognized as revenue upon the achievement of specified events if (1) the event is substantive in nature and the achievement of the event was not reasonably assured at the inception of the agreement and (2) the fees are non-refundable and non-creditable. Any event payments received prior to satisfying these criteria are recorded as deferred revenue. Under the Company s contract with HHS, revenue is recognized as reimbursable direct and indirect costs are incurred.

During the fourth quarter of 2009, the Company recognized revenues related to product sales of peramivir. Sales are recognized when products are shipped, title and risk of loss have passed, and collectability is reasonably assured. The Company did not provide a right of product return in conjunction with the sales of peramivir during 2009.

The Company recorded the following revenues for the years ended December 31:

	2009	2008	2007
Product sales:			
U.S. Department of Health and Human Services	$ 22,500,000	$	$
Neopharm Group (Israel)	397,508		
Other	25,000		
Total product sales	22,922,508		
Collaborative and other research and development revenues:			
U.S. Department of Health and Human Services	37,866,792	21,779,745	55,449,095
Shionogi	10,415,490	2,007,924	8,515,714
Mundipharma	3,142,818	4,615,448	5,298,271
Roche		27,783,252	1,898,403
Other	241,711	375,000	76,418

Total collaborative and other research and development revenues	51,666,811	56,561,369	71,237,901
Total revenues	$ 74,589,319	$ 56,561,369	$ 71,237,901

Table of Contents

Research and Development Expenses

The Company s research and development costs are charged to expense when incurred. Advance payments for goods or services that will be used or rendered for future research and development activities are deferred and capitalized. Such amounts are recognized as expense when the related goods are delivered or the related services are performed. Research and development expenses include, among other items, personnel costs, including salaries and benefits, manufacturing costs, clinical, regulatory, and toxicology services performed by CROs, materials and supplies, and overhead allocations consisting of various administrative and facilities related costs. Most of the Company s manufacturing and clinical and preclinical studies are performed by third-party CROs. Costs for studies performed by CROs are accrued by the Company over the service periods specified in the contracts and estimates are adjusted, if required, based upon the Company s on-going review of the level of services actually performed.

Additionally, the Company has license agreements with third parties, such as Albert Einstein College of Medicine of Yeshiva University (AECOM), Industrial Research, Ltd. (IRL), and the University of Alabama at Birmingham (UAB), which require fees related to sublicense agreements or maintenance fees. The Company expenses sublicense payments as incurred unless they are related to revenues that have been deferred, in which case the expenses are deferred and recognized over the related revenue recognition period. The Company expenses maintenance payments as incurred.

At December 31, 2009, the Company had deferred collaboration expenses of approximately $3,000,462. These deferred expenses were sub-license payments, paid to the Company s academic partners upon receipt of consideration from various commercial partners. These deferred expenses would not have been incurred without receipt of such payments from the Company s commercial partners and are being expensed in proportion to the related revenue being recognized. The Company believes that this accounting treatment appropriately matches expenses with the associated revenue.

Stock-Based Compensation

All share-based payments, including grants of stock option awards and restricted stock awards, are recognized in the Company s income statement based on their fair values. Stock-based compensation cost is estimated at the grant date based on the fair value of the award and is recognized as expense on a straight-line basis over the requisite service period of the award.

Net Loss Per Share

Net loss per share is based upon the weighted average number of common shares outstanding during the period. Diluted loss per share is equivalent to basic net loss per share for all periods presented herein because common equivalent shares from unexercised stock options, outstanding warrants, and common shares expected to be issued under the Company s employee stock purchase plan were anti-dilutive.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires the Company to make estimates and assumptions that affect the amounts reported in the financial statements. Actual results could differ from those estimates.

Note 2 Furniture and Equipment

Furniture and equipment consisted of the following at December 31:

Table of Contents

	2009	2008
Furniture and fixtures	$ 588,407	$ 535,994
Office equipment	1,383,829	1,126,282
Software	1,318,409	1,116,661
Laboratory equipment	6,989,960	6,973,158
Leased equipment	62,712	62,712
Leasehold improvements	6,175,698	6,100,516
	16,519,015	15,915,323
Less accumulated depreciation and amortization	(12,647,362)	(11,034,848)
Furniture and equipment, net	$ 3,871,653	$ 4,880,475

Note 3 Concentration of Market Risk

The Company s 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 the Company s supply of drugs for further preclinical testing and clinical trials.

Note 4 Accrued Expenses

Accrued expenses were comprised of the following at December 31:

	2009	2008
Accrued research and development expenses	$ 12,471,204	$ 6,479,546
Accrued general and administrative expenses	470,703	486,047
Stock purchase plan withholdings	162,265	138,237
Accrued bonus	2,111,073	1,011,739
Other	579,555	326,829
Total accrued expenses	$ 15,794,800	$ 8,442,398

Note 5 Lease Obligations and Other Contingencies

The Company has the following minimum payments under operating lease obligations that existed at December 31, 2009:

2010	$ 565,357
2011	853,672
2012	871,331
2013	872,729
2014	898,344
Thereafter	288,430
Total minimum payments	$ 4,349,863

The obligations in the preceding table are primarily related to the Company s leases for buildings in Birmingham, Alabama and Durham, North Carolina. The lease for the building in Alabama expires June 30, 2015 and currently requires monthly rents of $41,481 in December 2009 and escalates annually to a minimum of $48,072 per month in the final year. The Company has an option to renew the Alabama lease for an additional five years at the current market rate on the date of termination. The lease for the building in Durham, North Carolina expires December 31, 2014. This lease requires monthly rents of $24,788 beginning in January of 2011 and escalates annually to a minimum

of $27,894 per month in the final year.

Rent expense for operating leases was $763,353, $636,819, and $575,538 in 2009, 2008, and 2007, respectively.

Table of Contents

Note 6 Income Taxes

The Company has incurred net losses since inception and, consequently, has not recorded any U.S. federal and state income taxes. The differences between the Company s effective tax rate and the statutory tax rate in 2009, 2008, and 2007 are primarily due to non-deductible expenses, research and development tax credits, and increases in the valuation allowance.

Significant components of the Company s deferred tax assets and liabilities are as follows:

	2009	2008
Deferred tax assets:		
Net federal and state operating losses	$ 76,907,534	$ 68,863,295
General business credits	32,115,994	32,972,811
Fixed assets	1,224,636	1,101,002
Reserve for inventories	1,606,813	
Accrued expenses	997,073	813,383
Deferred revenue	7,262,703	8,097,958
Stock-based compensation	3,953,281	3,079,952
Total deferred tax assets	124,068,034	114,928,401
Valuation allowance	(124,068,034)	(114,928,401)
Total deferred tax liabilities		
Net deferred tax assets	$	$

The majority of the Company s deferred tax assets relate to net operating loss and research and development carryforwards that can only be realized if the Company is profitable in future periods. It is uncertain whether the Company will realize any tax benefit related to these carryforwards. Accordingly, the Company has provided a full valuation allowance against the net deferred tax assets due to uncertainties as to their ultimate realization. The valuation allowance will remain at the full amount of the deferred tax assets until it is more likely than not that the related tax benefits will be realized. The Company s valuation allowance increased by $9,139,633 in 2009, $8,476,111 in 2008, and $16,143,862 in 2007.

As of December 31, 2009, the Company had net federal operating loss carryforwards of $187,427,790, net state operating loss carryforwards of $224,656,598, and research and development credit carryforwards of $32,115,994, all of which expire at various dates from 2010 through 2029.

The Company s net federal and state operating loss carryforwards include $3,913,479 of excess tax benefits related to a deduction from the exercise of stock options. The tax benefit of these deductions has not been recognized in deferred tax assets. If utilized, the benefits from these deductions will be recorded as adjustments to income tax expense and additional paid-in capital.

The Company recognizes the impact of a tax position in its financial statements if it is more likely than not that the position will be sustained on audit based on the technical merits of the position. The Company has concluded that it has one uncertain tax position pertaining to its research and development credit carryforwards. The Company has not yet conducted an in-depth study of its research and development credits. This study could result in an increase or decrease to the Company s research and development credits. Until studies are conducted of the Company s research and development credits, no amounts are being recorded as an unrecognized tax benefits, separate from the valuation allowance against deferred tax assets. Any future changes to the Company s unrecognized tax benefits would be offset by an adjustment to the valuation allowance and there would be no impact on the Company s financial statements.

Additionally, utilization of the Company s net operating loss carryforwards could be subject to a substantial annual limitation due to ownership change limitations described in Section 382 of the Internal Revenue Code and similar

state provisions. The annual limitations could result in the expiration of net operating loss carryforwards before utilization. The Company has not performed a Section 382 change in control study since 2007 in order to determine if there is an annual limitation on the amount of net operating loss carryforward that can be deducted in any single year. However, it is not anticipated that any such analysis would have an impact on the Company s financial statements as a result of offsetting changes in the valuation allowance.

Table of Contents

Tax years 2006-2008 remain open to examination by the major taxing jurisdictions to which the Company is subject. Additionally, years prior to 2006 are also open to examination to the extent of loss and credit carryforwards from those years. The Company recognizes interest and penalties accrued related to unrecognized tax benefits as components of its income tax provision. However, there were no provisions or accruals for interest and penalties in 2009, 2008, and 2007.

Note 7 Stockholders Equity

In November 2009, the Company entered into an Underwriting Agreement with Morgan Stanley in connection with a registered offering of 5,000,000 shares of its common stock at a public offering price of $9.75 per share, resulting in proceeds net of offering costs of $45,740,190. The common stock was issued pursuant to a prospectus supplement filed with the Securities and Exchange Commission pursuant to Rule 424(b)(2) of the Securities Act of 1933, as amended (the Securities Act).

In August 2007, the Company entered into a Stock and Warrant Purchase Agreement with a group of existing stockholders for the private placement of 8,315,513 shares of the Company s common stock at a purchase price of $7.80 per share and warrants to purchase 3,159,895 shares of the Company s common stock at a purchase price of $0.125 per warrant. The proceeds from the sale, net of offering costs, were $65,118,092. The exercise price of the warrants is $10.25 per share. All of the warrants remain outstanding as of December 31, 2009 and will expire in August 2012. The participants in the transaction 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 were shareholders of the Company at the time of the offering. Subsequent to the offering, the Company registered the shares and warrants under the Securities Act for resale.

In May 2007, the stockholders approved an amendment to the Company s third restated certificate of incorporation to increase the number of shares of common stock authorized to issue from 45,000,000 to 95,000,000. All shares of the Company s common stock, including the additional shares authorized by the amendment, are equal in rank and have the same voting, dividend, and liquidation rights.

In June 2002, the Company s Board of Directors adopted a stockholder rights plan and, pursuant thereto, issued preferred stock purchase rights (Rights) to the holders of the Company s 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 owned more than 15% at the time the Rights were put in place) of the Company s 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. The rights are not exercisable until the distribution date, as defined in the Rights Agreement by and between the Company and American Stock Transfer & Trust Company, as Rights Agent. The Rights will expire at the close of business on June 24, 2012, unless that final expiration date is extended or unless the rights are earlier redeemed or exchanged by the Company.

Each Right entitles the registered holder to purchase from the Company one one-thousandth of a share of Series B Junior Participating Preferred Stock (Series B), par value $0.001 per share, at a purchase price of $26.00, subject to adjustment. Shares of Series B purchasable upon exercise of the Rights will not be redeemable. Each share of Series B will be entitled to a dividend of 1,000 times the dividend declared per share of common stock. In the event of liquidation, each share of Series B will be entitled to a payment of 1,000 times the payment made per share of common stock. Each share of Series B will have 1,000 votes, voting together with the common stock. Finally, in the event of any merger, consolidation, or other transaction in which shares of common stock are exchanged, each share of Series B will be entitled to receive 1,000 times the amount received per share of common stock. Effective in November 2008, the Company increased the authorized shares available under these rights to 95,000 to match the authorized common shares of 95,000,000 at that time. In addition, the 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 the Company s stockholders.

Note 8 Stock-Based Compensation

Table of Contents

Stock Incentive Plan

As of December 31, 2009, the Company had two stock-based employee compensation plans, the Stock Incentive Plan (Incentive Plan), which was amended and restated in February 2009 and approved by the Company s stockholders in April 2009, and the Employee Stock Purchase Plan (ESPP), which was amended and restated in February 2008 and approved by the Company s stockholders in May 2008. In addition, during 2007, the Company made an inducement grant outside of the Incentive Plan and ESPP to recruit a new employee to a key position within the Company. Stock-based compensation expense of $5,524,883 ($5,140,487 of expense related to the Incentive Plan, $234,692 of expense related to the ESPP, and $149,704 of expense related to the inducement grant) was recognized during 2009, while $5,860,654 ($5,545,458 of expense related to the Incentive Plan, $165,492 of expense related to the ESPP, and $149,704 of expense related to the inducement grant) was recognized during 2008 and $5,691,028 ($5,428,505 of expense related to the Incentive Plan, $150,245 of expense related to the ESPP, and $112,278 of expense related to the inducement grant) was recognized during 2007.

Under the Incentive Plan, the Company grants stock option awards and restricted stock awards to its employees, directors, and consultants. Stock option awards are granted with an exercise price equal to the market price of the Company s stock at the date of grant. Stock option awards granted to employees generally vest 25% after one year and monthly thereafter on a pro rata basis over the next three years until fully vested after four years. Stock option awards granted to non-employee directors of the Company generally vest over one year. All stock option awards have contractual terms of 10 years. The vesting exercise provisions of all awards granted under the Incentive Plan are subject to acceleration in the event of certain stockholder-approved transactions, or upon the occurrence of a change in control as defined in the Incentive Plan.

Related activity under the Incentive Plan is as follows:

	Awards Available	Options Outstanding	Weighted Average Exercise Price
Balance December 31, 2006	820,754	3,952,568	$ 8.94
Plan amendment	1,200,000		
Stock option awards granted	(1,721,706)	1,721,706	9.51
Restricted stock awards granted	(50,000)		
Stock option awards exercised		(308,037)	4.48
Stock option awards canceled	342,979	(342,979)	12.02
Balance December 31, 2007	592,027	5,023,258	9.20
Plan amendment	1,200,000		
Stock option awards granted	(1,060,005)	1,060,005	3.38
Restricted stock awards granted	(76,536)		
Stock option awards exercised		(146,470)	2.72
Stock option awards canceled	459,144	(459,144)	8.53
Balance December 31, 2008	1,114,630	5,477,649	8.30
Plan amendment	1,540,000		
Stock option awards granted	(1,559,233)	1,559,233	2.02
Stock option awards exercised		(532,379)	3.98
Stock option awards canceled	677,975	(677,975)	12.04
Balance December 31, 2009	1,773,372	5,826,528	6.58

For stock option awards granted under the Incentive Plan during 2009, 2008, and 2007, the fair value was estimated on the date of grant using a Black-Scholes option pricing model and the assumptions noted in the table below. The weighted average grant date fair value of these awards granted during 2009, 2008, and 2007 was $1.52, $2.16 and $6.16, respectively. The fair value of the stock option awards is amortized to expense over the vesting periods using a straight-line expense attribution method. The following explanations describe the assumptions used by the Company to value the stock option awards granted during 2009, 2008, and 2007. The expected life is based on the average of the assumption that all outstanding stock option awards will be exercised at full vesting and the assumption that all outstanding stock option awards will be exercised at the midpoint of the current date (if already vested) or at full vesting (if not yet vested) and the full contractual term. The expected volatility represents an

Table of Contents

average of the implied volatility on the Company s publicly traded options, the volatility over the most recent period corresponding with the expected life, and the Company s long-term reversion volatility. The Company has assumed no expected dividend yield, as dividends have never been paid to stock or option holders and will not be for the foreseeable future. The weighted average risk-free interest rate is the implied yield currently available on zero-coupon government issues with a remaining term equal to the expected term.

Weighted Average Assumptions for Stock Option Awards Granted under the Incentive Plan

	2009	2008	2007
Expected Life	5.6	5.5	5.7
Expected Volatility	104.2%	78.4%	74.5%
Expected Dividend Yield	0.0%	0.0%	0.0%
Risk-Free Interest Rate	2.1%	2.8%	4.6%

The total intrinsic value of stock option awards exercised under the Incentive Plan was $2,786,900 during 2009, $223,369 during 2008, and $1,347,010 during 2007. The intrinsic value represents the total proceeds (fair market value at the date of exercise, less the exercise price, times the number of stock option awards exercised) received by all individuals who exercised stock option awards during the period.

The following table summarizes, at December 31, 2009, by price range: (1) for stock option awards outstanding under the Incentive Plan, the number of stock option awards outstanding, their weighted average remaining life and their weighted average exercise price; and (2) for stock option awards exercisable under the Plan, the number of stock option awards exercisable and their weighted average exercise price:

	Outstanding			Exercisable	
Range	Number	Weighted Average Remaining Life	Weighted Average Exercise Price	Number	Weighted Average Exercise Price
$0 to 3	1,660,746	8.4	$ 1.38	232,674	$ 1.30
3 to 6	1,072,554	7.0	3.65	746,015	3.79
6 to 9	1,326,091	5.7	8.09	1,060,760	8.21
9 to 12	882,570	7.1	11.37	621,284	11.37
12 to 15	860,280	6.7	12.53	713,787	12.53
15 to 18	5,167	6.0	15.58	5,062	15.57
18 to 21	2,000	6.1	18.99	1,958	18.99
21 to 24	5,000	0.3	23.75	5,000	23.75
24 to 27	6,120	0.2	26.05	6,120	26.05
27 to 30	6,000	0.4	29.29	6,000	29.29
$0 to 30	5,826,528	7.0	6.58	3,398,660	8.36

The weighted average remaining contractual life of stock option awards exercisable under the Incentive Plan at December 31, 2009 was 5.9 years.

The aggregate intrinsic value of stock option awards outstanding and exercisable under the Incentive Plan at December 31, 2009 was $3,223,943. The aggregate intrinsic value represents the value (the period s closing market price, less the exercise price, times the number of in-the-money stock option awards) that would have been received by all stock option award holders under the Incentive Plan had they exercised their stock option awards at the end of the year.

The total fair value of the stock option awards vested under the Incentive Plan was $5,261,384 during 2009, $6,928,011 during 2008, and $5,613,761 during 2007.

As of December 31, 2009, the number of stock option awards vested and expected to vest under the Incentive Plan is 5,250,299. The weighted average exercise price of these stock option awards is $6.65 and their weighted average remaining contractual life is 6.9 years.

Table of Contents

During 2007, the Company granted 50,000 restricted stock awards under the Incentive Plan with a grant date fair value of $11.81. During the first quarter of 2009, 25,000 of these restricted stock awards vested. The remainder of these restricted stock awards will vest during the first quarter of 2011.

During the second quarter of 2008, the Company also granted 76,536 restricted stock awards under the Incentive Plan with a grant date fair value of $3.12. All of these restricted stock awards vested on December 31, 2009.

Employee Stock Purchase Plan

The Company has reserved a total of 600,000 shares of common stock to be purchased under the ESPP, of which 56,494 shares remain available for purchase at December 31, 2009. Eligible employees may authorize up to 15% of their salary to purchase common stock at the lower of 85% of the beginning or 85% of the ending price during six-month purchase intervals. No more than 3,000 shares may be purchased by any one employee at the six-month purchase dates and no employee may purchase stock having a fair market value at the commencement date of $25,000 or more in any one calendar year.

There were 123,357, 84,907, and 34,855 shares of common stock purchased under the ESPP in 2009, 2008, and 2007, respectively, at a weighted average price per share of $1.57, $3.15, and $7.74, respectively. Expense of $234,692, $165,492, and $150,245 related to the ESPP was recognized during 2009, 2008, and 2007, respectively. Compensation expense for shares purchased under the ESPP related to the purchase discount and the look-back option were determined using a Black-Scholes option pricing model. The weighted average grant date fair values of shares granted under the ESPP during 2009, 2008, and 2007 were $1.70, $1.34, and $2.98, respectively.

Stock Inducement Grant

In March 2007, the Company s Board of Directors approved a stock inducement grant of 110,000 stock option awards and 10,000 restricted stock awards to recruit a new employee to a key position within the Company. The stock option awards were granted in April 2007 with an exercise price equal to the market price of the Company s stock at the date of grant. The awards vest 25% after one year and monthly thereafter on a pro rata basis over the next three years until fully vested after four years. The stock option awards have contractual terms of 10 years. The vesting exercise provisions of both the stock option awards and the restricted stock awards granted under the inducement grant are subject to acceleration in the event of certain stockholder-approved transactions, or upon the occurrence of a change in control as defined in the respective agreements. The weighted average grant date fair value of these stock option awards was $5.25. The exercise price of the stock option awards and the grant date fair value of the restricted stock awards granted under the inducement grant was $8.20. As of December 31, 2009, 6,666 of these restricted stock awards have vested.

As of December 31, 2009, there was approximately $5,682,228 of total unrecognized compensation cost related to non-vested employee stock option awards and restricted stock awards granted by the Company. That cost is expected to be recognized as follows: $3,845,303 in 2010, $1,273,265 in 2011, $440,928 in 2012, and $122,732 in 2013.

Note 9 Employee Benefit Plans

In January 1991, the Company adopted an employee retirement plan (401(k) Plan) under Section 401(k) of the Internal Revenue Code covering all employees. Employee contributions may be made to the 401(k) Plan up to limits established by the Internal Revenue Service. Company matching contributions may be made at the discretion of the Board of Directors. The Company made matching contributions of $378,350, $418,215, and $330,559 in 2009, 2008, and 2007, respectively.

Note 10 Collaborative and Other Research and Development Contracts

U.S. Department of Health and Human Services (HHS). In January 2007, the Company was awarded a four-year contract from HHS to develop its influenza neuraminidase inhibitor, peramivir, for the treatment of seasonal and life-threatening influenza. The contract commits $102.6 million to support manufacturing, process validation, clinical studies, and other product approval requirements for peramivir. The contract with HHS is defined as a cost-

Table of Contents

plus-fixed-fee contract. That is, the Company is entitled to receive reimbursement for all costs incurred in accordance with the contract provisions that are related to the development of peramivir plus a fixed fee, or profit. HHS will make periodic assessments of progress and the continuation of the contract is based on the Company s performance, the timeliness and quality of deliverables, and other factors. The government has rights under certain contract clauses to terminate this contract. The contract is terminable by the government at any time for breach or without cause.

In September 2009, HHS and the Company executed a contract modification that awarded an additional $77.2 million to the Company to complete Phase III development of intravenous (i.v.) peramivir, bringing the total award from HHS for the development of peramivir to $179.9 million. The modification also extended the contract term by 12 months to five years.

Shionogi & Co., Ltd. (Shionogi"). In March 2007, the Company entered into an exclusive license agreement with Shionogi to develop and commercialize peramivir in Japan for the treatment of seasonal and potentially life-threatening human influenza. Under the terms of the agreement, Shionogi obtained rights to injectable formulations of peramivir in Japan in exchange for a $14.0 million up-front payment. The license provides for potential future milestone event payments (up to $21.0 million) and commercial event milestone payments (up to $95.0 million) in addition to double digit (between 10 and 20% range) royalty payments on product sales of peramivir. Generally, all payments under the agreement are nonrefundable and non-creditable, but they are subject to audit. Shionogi will be responsible for all development, regulatory, and marketing costs in Japan. The term of the agreement is from February 28, 2007 until terminated by either party in accordance with the license agreement. Either party may terminate in the event of an uncured breach. Shionogi has the right of without cause termination. In the event of termination all license and rights granted to Shionogi shall terminate and shall revert back to the Company. The Company developed peramivir under a license from UAB and will owe sublicense payments to them on the upfront payment and any future event payments and/or royalties received by the Company from Shionogi.

In October 2008, the Company and Shionogi amended the license agreement to expand the territory covered by the agreement to include Taiwan and to provide rights for Shionogi to perform a Phase III clinical trial in Hong Kong.

The Company deferred the $14.0 million up-front payment that was initially received from Shionogi. This deferred revenue began to be amortized to revenue in April 2007 and will continue through December 2018. In December 2007, the Company received a $7.0 million milestone payment from Shionogi for their initiation of a Phase II clinical trial with i.v. peramivir. In November 2009, the Company received another $7.0 million milestone payment from Shionogi for their filing of a New Drug Application (NDA) in Japan to seek regulatory approval for i.v. peramivir.

Green Cross Corporation (Green Cross). In June 2006, the Company entered into an agreement with Green Cross to develop and commercialize peramivir in Korea. Under the terms of the agreement, Green Cross will be responsible for all development, regulatory, and commercialization costs in Korea. The Company received a one-time license fee of $250,000. The agreement also provides for relatively insignificant future milestone payments. The license also provides that the Company will share in profits resulting from the sale of peramivir in Korea, including the sale of peramivir to the Korean government for stockpiling purposes. Furthermore, Green Cross will pay the Company a premium over its cost to supply peramivir for development and any future marketing of peramivir products in Korea. Both parties have the right to terminate in the event of an uncured material breach. In the event of termination all rights, data, materials, products and other information would be transferred to the Company. The Company deferred the up-front payment that was received from Green Cross. This deferred revenue began to be amortized to revenue August 2006 and will continue through November 2009.

Mundipharma International Holdings Limited (Mundipharma). In February 2006, the Company entered into an exclusive, royalty bearing right and license agreement with Mundipharma for the development and commercialization of the Company s lead PNP inhibitor, forodesine, for use in oncology. Under the terms of the agreement, Mundipharma obtained rights to forodesine in markets across Europe, Asia, and Australasia in exchange for a $10.0 million up-front payment. In addition, Mundipharma contributed $10.0 million of the documented out of pocket development costs incurred by the Company in respect of the current and planned trials as of the effective date of the agreement and Mundipharma will conduct additional clinical trials at their own cost up to a maximum of

Table of Contents

$15.0 million. The license provides for possibility of future event payments totaling $155.0 million for achieving specified development, regulatory and commercial events (including certain sales level amounts following a product s launch) for certain indications. In addition, the agreement provides that the Company will receive royalties (ranging from single digits to mid teens) based on a percentage of net product sales, which varies depending upon when certain indications receive NDA approval in a major market country and can vary by country depending on the patent coverage or sales of generic compounds in a particular country. Generally, all payments under the agreement are nonrefundable and non-creditable, but they are subject to audit. The Company licensed forodesine and other PNP inhibitors from AECOM and IRL and will owe sublicense payments to these third parties on the upfront payment, event payments, and royalties received by the Company from Mundipharma.

For five years, Mundipharma will have a right of first negotiation on existing backup PNP inhibitors the Company develops through Phase IIb in oncology, but any new PNP inhibitors will be exempt from this agreement and the Company will retain all rights to such compounds. The Company retained the rights to forodesine in the U.S. and Mundipharma is obligated by the terms of the agreement to use commercially reasonable efforts to develop the licensed product in the territory specified by the agreement. The agreement will continue for the commercial life of the licensed products, but may be terminated by either party following an uncured material breach by the other party or in the event the pre-existing third party license with AECOM and IRL expires. It may be terminated by Mundipharma upon 60 days written notice without cause or under certain other conditions as specified in the agreement and all rights, data, materials, products and other information would be transferred back to the Company at no cost. In the event the Company terminates the agreement for material default or insolvency, the Company could have to pay Mundipharma 50% of the costs of any independent data owned by Mundipharma in accordance with the terms of the agreement.

The Company deferred the $10.0 million up-front payment that was received from Mundipharma in February 2006. This deferred revenue began to be amortized to revenue February 2006 and will end in October 2017, which is the date of expiration for the last-to-expire patent covered by the agreement. The costs reimbursed by Mundipharma for the current and planned trials of forodesine were recorded as revenue when the expense was incurred up to the $10.0 million limit stipulated in the agreement.

The Company is currently in dispute with Mundipharma regarding the contractual obligations of the parties with respect to certain costs related to the manufacturing and development of forodesine. Notwithstanding, the Company does not believe that it is responsible for any of the disputed amounts. The Company is engaged in ongoing discussion to resolve this dispute. The maximum potential exposure to the Company is estimated to be approximately $2.4 million. Because of the preliminary nature of the discussions, no amounts have been accrued as of December 31, 2009.

F.Hoffmann-La Roche Ltd. and Hoffman-La Roche Inc. (Roche). In November 2005, the Company entered into an exclusive license with Roche for the development and commercialization of the Company s second generation PNP inhibitor, BCX-4208, for the prevention of acute rejection in transplantation and for the treatment of autoimmune diseases. Under the terms of the agreement, Roche obtained worldwide rights to BCX-4208 in exchange for a $25.0 million up-front payment and a $5.0 million payment as reimbursement for a limited supply of material during the first 24 months of the collaboration.

In May 2008, the Company received notice that Roche was exercising the no cause termination right under the license agreement for BCX-4208. Upon termination during the fourth quarter of 2008, the Company recognized the remaining deferred revenue and deferred expense related to the license agreement, which was $26.5 million and $8.2 million, respectively.

Albert Einstein College of Medicine of Yeshiva University and Industrial Research, Ltd.(AECOM and IRL respectively). In June 2000, the Company licensed a series of potent inhibitors of PNP from AECOM and IRL. The lead drug candidates from this collaboration are forodesine and BCX-4208. The Company has obtained worldwide exclusive rights to develop and ultimately distribute these, or any other, drug candidates that might arise from research on these inhibitors. The Company has the option to expand the Agreement to include other inventions in the field made by the investigators or employees of AECOM and IRL. The Company has agreed to use commercially reasonable efforts to develop these drugs. In addition, the Company has agreed to pay certain milestone payments for

each licensed product (which range in the aggregate from $1.4 million to almost $4 million per indication) for

Table of Contents

future development of these inhibitors, single digit royalties on net sales of any resulting product made by the Company, and to share approximately one quarter of future payments received from other third-party partners, if any. In addition, the Company has agreed to pay annual license fees, which can range from $150,000 to $500,000, that are creditable against actual royalties and other payments due to AECOM and IRL. This agreement may be terminated by the Company at any time by giving 60 days advance notice or in the event of material uncured breach by AECOM and IRL.

The University of Alabama at Birmingham (UAB). The Company currently has agreements with UAB for influenza neuraminidase and complement inhibitors. Under the terms of these agreements, UAB performed specific research for the Company in return for research payments and license fees. UAB has granted the Company certain rights to any discoveries in these areas resulting from research developed by UAB or jointly developed with the Company. The Company has agreed to pay single digit royalties on sales of any resulting product and to share in future payments received from other third-party partners. The Company has completed the research under the UAB agreements. These two agreements have initial 25-year terms, are automatically renewable for five-year terms throughout the life of the last patent and are terminable by the Company upon three months notice and by UAB under certain circumstances. Upon termination both parties shall cease using the other parties proprietary and confidential information and materials, the parties shall jointly own joint inventions and UAB shall resume full ownership of all UAB licensed products. There is currently no activity between the Company and UAB on these agreements, but when the Company licenses this technology, such as in the case of the Shionogi and Green Cross agreements, or commercialize products related to these programs, we will owe sublicense fees or royalties on amounts we receive.

Emory University (Emory). In June 2000, the Company licensed intellectual property from Emory related to the hepatitis C polymerase target associated with hepatitis C viral infections. Under the original terms of the agreement, the research investigators from Emory provided the Company with materials and technical insight into the target. The Company has agreed to pay Emory single digit royalties on sales of any resulting product and to share in future payments received from other third party partners, if any. The Company can terminate this agreement at any time by giving 90 days advance notice. Upon termination, the Company would cease using the licensed technology.

Note 11 Quarterly Financial Information (Unaudited) (In thousands, except per share)

	First	Second	Third	Fourth
2009 Quarters				
Revenues	$ 4,359	$ 4,787	$ 10,548	$54,895
Net (loss) income	(9,292)	(8,684)	(10,627)	15,151
Diluted net (loss) income per share	(.24)	(.23)	(.28)	.37
2008 Quarters				
Revenues	$ 10,768	$ 2,659	$ 8,894	$34,240
Net (loss) income	(13,098)	(12,709)	(8,995)	10,070
Diluted net (loss) income per share	(.34)	(.33)	(.24)	.26

Note 12 Recent Accounting Pronouncements

The Company adopted the provisions of the Emerging Issues Task Force (EITF) guidance related to collaborative arrangements on January 1, 2009. This guidance defines collaborative arrangements and establishes reporting requirements for transactions between participants in collaborative arrangements. This guidance has been applied retrospectively to all prior periods presented for significant collaborative arrangements existing as of the effective date. See Notes 1 and 10 for additional information.

The Company adopted the provisions of the FASB Staff Position (FSP) relating to investments on January 1, 2009. This FSP amends the other-than-temporary recognition guidance for debt securities and requires additional interim and annual disclosures of other-than-temporary impairments on debt and equity securities. Pursuant to the new guidance, an other-than-temporary impairment has occurred if a company does not expect to recover the entire amortized cost basis of the security. In this situation, if the company does not intend to sell the impaired security, and it is not more likely than not it will be required to sell the security before the recovery of its amortized cost basis, the amount of the other-than-temporary impairment recognized in earnings is limited to the portion attributed

68

Table of Contents

to the credit loss. The remaining portion of the other-than-temporary impairment is then recorded in other comprehensive income (loss). This FSP has been applied to existing and new securities as of January 1, 2009. The implementation of this FSP was not material to the Company s financial statements.

In 2009, the Company adopted the provisions of the FASB Statement on subsequent events. This Statement provides authoritative accounting literature and disclosure requirements for material events occurring subsequent to the balance sheet date and prior to the issuance of the financial statements. The implementation of this Statement had no effect on the Company s financial statements.

In 2009, the FASB ratified EITF guidance related to revenue recognition that amends the previous guidance on arrangements with multiple deliverables. This guidance provides principles and application guidance on whether multiple deliverables exist, how the arrangements should be separated, and how the consideration should be allocated. It also clarifies the method to allocate revenue in an arrangement using the estimated selling price. This guidance is effective for the Company on January 1, 2011. The Company is currently assessing the impact of this guidance on its financial statements.

Note 13 Subsequent Events

In January 2010, the Company announced that Shionogi had received marketing and manufacturing approval for i.v. peramivir to treat patients with influenza in Japan. As a consequence of this filing, the Company will receive a milestone payment of $7.0 million during the first quarter of 2010.

Table of Contents

Report of Independent Registered Public Accounting Firm on Financial Statements

The Board of Directors and Stockholders
BioCryst Pharmaceuticals, Inc.

We have audited the accompanying balance sheets of BioCryst Pharmaceuticals, Inc. as of December 31, 2009 and 2008, and the related statements of operations, stockholders equity and cash flows for each of the three years in the period ended December 31, 2009. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of BioCryst Pharmaceuticals, Inc. at December 31, 2009 and 2008, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2009, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), BioCryst Pharmaceuticals, Inc. s internal control over financial reporting as of December 31, 2009, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 9, 2010 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Birmingham, Alabama
March 9, 2010

Table of Contents

Report of Independent Registered Public Accounting Firm on Internal Control

The Board of Directors and Stockholders
BioCryst Pharmaceuticals, Inc.

We have audited BioCryst Pharmaceuticals, Inc. s internal control over financial reporting as of December 31, 2009, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). BioCryst Pharmaceuticals, Inc. s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, BioCryst Pharmaceuticals, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2009, based on the COSO criteria**.**

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the balance sheets of BioCryst Pharmaceuticals, Inc. as of December 31, 2009 and 2008, and the related statements of operations, stockholders equity, and cash flows for each of the three years in the period ended December 31, 2009 of BioCryst Pharmaceuticals, Inc. and our report dated March 9, 2010 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP
Birmingham, Alabama
March 9, 2010

Table of Contents

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain a set of disclosure controls and procedures that are designed to ensure that information relating to BioCryst Pharmaceuticals, Inc. required to be disclosed in our periodic filings under the Securities Exchange Act of 1934, as amended (the Exchange Act), is recorded, processed, summarized and reported in a timely manner under the Exchange Act of 1934. We carried out an evaluation as required by paragraph (b) of Rule 13a-15 or Rule 15d-15 under the Exchange Act, under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) or Rule 15d-15 under the Exchange Act). Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2009, our disclosure controls and procedures are effective. We believe that our disclosure controls and procedures will ensure that information required to be disclosed in the reports filed or submitted by us under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission, and include controls and procedures designed to ensure that information required to be disclosed by us in such reports is accumulated and communicated to our management, including our Chairman and Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Management s Report on Internal Control Over Financial Reporting

Management of BioCryst Pharmaceuticals, Inc. is responsible for establishing and maintaining adequate internal control over financial reporting and for the assessment of the effectiveness of internal control over financial reporting. As defined by the Securities and Exchange Commission, internal control over financial reporting is a process designed by, or under the supervision of our principal executive and principal financial officers and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the consolidated financial statements in accordance with U.S. generally accepted accounting principles.

Our internal control over financial reporting is supported by written policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the consolidated financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In connection with the preparation of our annual financial statements, management has undertaken an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2009, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO Framework). Management s assessment included an evaluation of the design of our internal control over financial reporting and testing of the operational effectiveness of those controls.

Table of Contents

Based on this assessment, management has concluded that as of December 31, 2009, our internal control over financial reporting was effective. Management believes our internal control over financial reporting will provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

Ernst & Young LLP, the independent registered public accounting firm that audited our financial statements included in this report, has issued an attestation report on the Company s internal control over financial reporting, a copy of which appears on page 71 of this annual report.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting that occurred during the quarter ended December 31, 2009 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is set forth under the captions *Items to be Voted on 1. Election of Directors, Executive Officers, Section 16(a) Beneficial Ownership Reporting Compliance* and *Corporate Governance* in our definitive Proxy Statement for the 2010 Annual Meeting of Stockholders and incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is set forth under the captions *Compensation Discussion and Analysis, Summary Compensation Table, Grants of Plan-Based Awards in 2009, Outstanding Equity Awards at December 31, 2009, 2009 Option Exercises and Stock Vested, Potential Payments Upon Termination or Change in Control and 2009 Director Compensation* in our definitive Proxy Statement for the 2010 Annual Meeting of Stockholders and incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is set forth under the captions *Equity Compensation Plan Information* and *Security Ownership of Certain Beneficial Owners and Management* in our definitive Proxy Statement for the 2010 Annual Meeting of Stockholders and incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is set forth under the captions *Certain Relationships and Related Transactions* and *Corporate Governance* in our definitive Proxy Statement for the 2010 Annual Meeting of Stockholders and incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is set forth under the caption *Items to be Voted on 3. Ratification of Appointment of Independent Registered Public Accountants* in our definitive Proxy Statement for the 2010 Annual Meeting of Stockholders and incorporated herein by reference.

Table of Contents

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Financial Statements

	Page in Form 10-K
The following financial statements appear in Item 8 of this Form 10-K:	
Balance Sheets at December 31, 2009 and 2008	51
Statements of Operations for the years ended December 31, 2009, 2008 and 2007	52
Statements of Stockholders Equity for the years ended December 31, 2009, 2008 and 2007	53
Statements of Cash Flows for the years ended December 31, 2009, 2008 and 2007	54
Notes to Financial Statements	55
Report of Independent Registered Public Accounting Firm on Financial Statements	70
Report of Independent Registered Public Accounting Firm on Internal Control	71

No financial statement schedules are included because the information is either provided in the financial statements or is not required under the related instructions or is inapplicable and such schedules therefore have been omitted.

(b) Exhibits. See Index of Exhibits.

Table of Contents

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on March 9, 2010.

BIOCRYST PHARMACEUTICALS, INC.

By: /s/ Jon P. Stonehouse
Jon P. Stonehouse
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on March 9, 2010:

Signature	Title(s)
/s/ Jon P. Stonehouse	President, Chief Executive Officer and Director
(Jon P. Stonehouse)	
/s/ Stuart Grant (Stuart Grant)	Senior Vice President and Chief Financial Officer and Treasurer
/s/ J. Michael Mills	Controller and Principal Accounting Officer
(J. Michael Mills)	
/s/ Stephen R. Biggar	Director
(Stephen R. Biggar, M.D., Ph.D.)	
/s/ Stanley C. Erck	Director
(Stanley C. Erck)	
/s/ William W. Featheringill	Director
(William W. Featheringill)	
/s/ John L. Higgins	Director
(John L. Higgins)	
/s/ Zola P. Horovitz	Director
(Zola P. Horovitz, Ph.D.)	
/s/ Charles A. Sanders	Director
(Charles A. Sanders, M.D.)	

/s/ Beth C. Seidenberg Director

(Beth C. Seidenberg, M.D.)

Table of Contents

INDEX TO EXHIBITS

Number	Description
3.1	Third Restated Certificate of Incorporation of Registrant. Incorporated by reference to Exhibit 3.1 to the Company s Form 8-K filed December 22, 2006.
3.2	Certificate of Amendment to the Third Restated Certificate of Incorporation of Registrant. Incorporated by reference to Exhibit 3.1 to the Company s Form 8-K filed July 24, 2007.
3.3	Certificate of Increase of Authorized Number of Shares of Series B Junior Participating Preferred Stock. Incorporated by reference to Exhibit 3.1 to the Company s Form 8-K filed November 4, 2008.
3.4	Amended and Restated Bylaws of Registrant effective October 29, 2008. Incorporated by reference to Exhibit 3.2 to the Company s Form 8-K filed November 4, 2008.
4.1	Rights Agreement, dated as of June 17, 2002, by and between the Company and American Stock Transfer & Trust Company, as Rights Agent, which includes the Certificate of Designation for the Series B Junior Participating Preferred Stock as Exhibit A and the form of Rights Certificate as Exhibit B. Incorporated by reference to Exhibit 4.1 to the Company s Form 8-A filed June 17, 2002.
4.2	Amendment to Rights Agreement, dated as of August 5, 2007. Incorporated by reference to Exhibit 4.2 of the Company s Form 10-Q filed August 9, 2007.
10.1&	Stock Incentive Plan, as amended and restated effective February 28, 2008. Incorporated by reference to Appendix A to the Company s Definitive Proxy Statement, filed April 16, 2008.
10.2&	Employee Stock Purchase Plan, as amended and restated effective February 28, 2008. Incorporated by reference to Appendix B to the Company s Definitive Proxy Statement, filed April 16, 2008.
10.3&	Retention Bonus Agreement between BioCryst Pharmaceuticals, Inc. and Stuart Grant dated May 21, 2008. Incorporated by reference to Exhibit 10.25 of the Company s Form 10-Q filed August 8, 2008.
10.4&	Retention Bonus Agreement between BioCryst Pharmaceuticals, Inc. and David McCullough dated May 21, 2008. Incorporated by reference to Exhibit 10.26 of the Company s Form 10-Q filed August 8, 2008.
10.5&	Employment Letter Agreement between BioCryst Pharmaceuticals, Inc. and William P. Sheridan dated June 12, 2008. Incorporated by reference to Exhibit 10.27 of the Company s Form 10-Q filed August 8, 2008.
10.6&	Consulting Agreement between BioCryst Pharmaceuticals, Inc. and J. Claude Bennett, M.D. dated June 13, 2008. Incorporated by reference to Exhibit 10.28 of the Company s Form 10-Q filed August 8, 2008.
10.7#	Agreement dated January 3, 2007, between BioCryst Pharmaceuticals, Inc. and the Department of Health and Human Services, as amended by Amendment number 1 dated January 3, 2007 and Amendment number 2 dated May 11, 2007. (Portions omitted pursuant to request for confidential treatment.) Incorporated by reference to Exhibit 10.3 to the Company s Form 10-Q filed August 9, 2007.

10.8 Amendment #3 to the Agreement between BioCryst Pharmaceuticals, Inc. and the Department of Health and Human Services, dated October 2, 2007. Incorporated by reference to Exhibit 10.6 of the Company s Form 10-K filed March 4, 2008.

10.9 Amendment #4 to the Agreement between BioCryst Pharmaceuticals, Inc. and the Department of Health and Human Services dated April 3, 2008. Incorporated by reference to Exhibit 10.29 of the Company s Form 10-Q filed August 8, 2008.

10.10 Amendment #5 to the Agreement between BioCryst Pharmaceuticals, Inc. and the Department of Health and Human Services dated July 2, 2008. Incorporated by reference to Exhibit 10.30 of the Company s Form 10-Q filed August 8, 2008.

10.11 Amendment #6 to the Agreement between BioCryst Pharmaceuticals, Inc. and the Department of Health and Human Services dated August 18, 2008. Incorporated by reference to Exhibit 10.1 of the

Table of Contents

Number	Description
	Company s Form 8-K filed November 7, 2008.
10.12	Amendment #7 to the Agreement between BioCryst Pharmaceuticals, Inc. and the Department of Health and Human Services dated November 17, 2008. Incorporated by reference to Exhibit 10.12 of the Company s Form 10-K filed March 6, 2009.
(10.13)	Amendment #8 to the Agreement between BioCryst Pharmaceuticals, Inc. and the Department of Health and Human Services dated March 13, 2009.
10.14	Amendment #9 to the Agreement between BioCryst Pharmaceuticals, Inc. and the Department of Health and Human Services dated September 18, 2009. Incorporated by reference to Exhibit 10.1 of the Company s Form 10-Q filed November 6, 2009.
10.15	Amendment #10 to the Agreement between the Company and the U.S. Department of Health & Human Services, dated October 15, 2009. Incorporated by reference to Exhibit 10.2 of the Company s Form 10-Q filed November 6, 2009.
(10.16)	Order for Supplies or Services from the U.S. Department of Health & Human Services, dated November 4, 2009.
10.17&	Annual Incentive Plan. Incorporated by reference to Exhibit 10.1 of the Company s Form 10-K filed March 4, 2008.
10.18&	Executive Relocation Policy. Incorporated by reference to Exhibit 10.2 of the Company s Form 10-K filed March 4, 2008.
10.19&	Amendment to Employment Letter Agreement for Stuart Grant Dated July 23, 2007. Incorporated by reference to Exhibit 10.3 of the Company s Form 10-K filed March 4, 2008.
10.20&	Form of Notice of Grant of Non-Employee Director Automatic Stock Option and Stock Option Agreement. Incorporated by reference to Exhibit 10.4 of the Company s Form 10-K filed March 4, 2008.
10.21&	Form of Notice of Grant of Stock Option and Stock Option Agreement. Incorporated by reference to Exhibit 10.5 of the Company s Form 10-K filed March 4, 2008.
10.22#	License, Development and Commercialization Agreement dated as of February 28, 2007, by and between the Company and Shionogi & Co., Ltd. Incorporated by reference to Exhibit 10.4 to the Company s Form 10-Q filed May 10, 2007. (Portions omitted pursuant to request for confidential treatment.)
10.23#	First Amendment to License, Development and Commercialization Agreement, effective as of September 30, 2008, between the Company and Shionogi & Co., Ltd. Incorporated by reference to Exhibit 10.19 to the Company s Form 10-K filed March 6, 2009. (Portions omitted pursuant to request for confidential treatment.)
10.24&	Employment Letter Agreement dated April 2, 2007, by and between the Company and David McCullough. Incorporated by reference to Exhibit 10.5 to the Company s Form 10-Q filed May 10, 2007.

10.25&	Amended and Restated Employment Letter Agreement dated February 14, 2007, by and between the Company and Jon P. Stonehouse. Incorporated by reference to Exhibit 10.12 to the Company s Form 10-K for the year ended December 31, 2006, filed March 14, 2007.
10.26	Warehouse Lease dated July 12, 2000 between RBP, LLC an Alabama Limited Liability Company and the Registrant for office/warehouse space. Incorporated by reference to Exhibit 10.8 to the Company s Form 10-Q for the second quarter ending June 30, 2000 filed August 8, 2000.
10.27	Third Amendment to Lease Agreement dated August 7, 2007, by and between Riverchase Capital LLC, a Florida limited liability company, Stow Riverchase, LLC, a Florida limited liability company, as successor landlord to RBP, LLC and the Company. Incorporated by reference to Exhibit 10.4 of the

Table of Contents

Number	Description
	Company s Form 10-Q filed August 9, 2007.
10.28	Stock and Warrant Purchase Agreement dated as of August 6, 2007, by and among BioCryst Pharmaceuticals, Inc. and each of the Investors identified on the signature pages thereto. Incorporated by reference to Exhibit 4.1 of the Company s Form 8-K filed August 7, 2007.
10.29&	Employment letter agreement between BioCryst Pharmaceuticals, Inc. and Stuart Grant dated July 23, 2007. Incorporated by reference to Exhibit 10.1 of the Company s Form 8-K filed July 26, 2007.
10.30	Stock Purchase Agreement, dated as of February 17, 2005, by and among BioCryst Pharmaceuticals, Inc., Baker Bros. Investments, L.P., Baker Biotech Fund II, L.P., Baker Bros. Investments II, L.P., Baker Biotech Fund II (Z), L.P., Baker/Tisch Investments, L.P., Baker Biotech Fund III, L.P., Baker Biotech Fund I, L.P., Baker Biotech Fund III (Z), L.P. and 14159, L.P. Incorporated by reference to Exhibit 4.1 to the Company s Form 8-K filed February 17, 2005.
10.31#	Development and License Agreement dated as of February 1, 2006, by and between BioCryst Pharmaceuticals, Inc. and Mundipharma International Holdings Limited (Portions omitted pursuant to request for confidential treatment.) Incorporated by reference to Exhibit 10.2 to the Company s Form 8-K/A filed May 2, 2006. (Portions omitted pursuant to request for confidential treatment.)
10.32#	License Agreement dated as of June 27, 2000, by and among Albert Einstein College of Medicine, Industrial Research, Ltd. and BioCryst Pharmaceuticals, Inc., as amended by the First Amendment Agreement dated as of July 26, 2002 and the Second Amendment Agreement dated as of April 15, 2005. Incorporated by reference to Exhibit 10.1 to the Company s Form 8-K filed November 30, 2005. (Portions omitted pursuant to request for confidential treatment.)
(10.33*)	Third Amendment Agreement by and among Albert Einstein College of Medicine, Industrial Research, Ltd. and BioCryst Pharmaceuticals, Inc., dated as of December 11, 2009. (Portions omitted pursuant to request for confidential treatment.)
10.34#	Development and License Agreement dated as of November 29, 2005, by and between BioCryst Pharmaceuticals, Inc. and F.Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc. (Portions omitted pursuant to request for confidential treatment.) Incorporated by reference to Exhibit 10.2 to the Company s Form 8-K/A filed December 22, 2005. (Portions omitted pursuant to request for confidential treatment.)
10.35	Stock Purchase Agreement, dated as of December 14, 2005, by and among BioCryst Pharmaceuticals, Inc., Kleiner Perkins Caufield & Byers, Texas Pacific Group Ventures and KPTV, LLC. Incorporated by reference to Exhibit 4.1 to the Company s Form 8-K filed December 16, 2005.
10.36	Nomination and Observer Agreement, dated as of December 16, 2005, by and between BioCryst Pharmaceuticals, Inc. and Kleiner Perkins Caufield & Byers. Incorporated by reference to Exhibit 4.2 to the Company s Form 8-K filed December 16, 2005.
10.37&	Severance Agreement and General Release between Michael Darwin and BioCryst Pharmaceuticals, Inc., dated December 31, 2008. Incorporated by reference to Exhibit 10.32 to the Company s Form 10-K filed March 6, 2009.

(23)	Consent of Ernst & Young, Independent Registered Public Accounting Firm.
(31.1)	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
(31.2)	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
(32.1)	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
(32.2)	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Table of Contents

* Confidential treatment requested.

\# Confidential treatment granted.

& Management contracts.

( ) Filed herewith.