

BIOCRYST PHARMACEUTICALS INC  
Form 10-K405  
March 25, 2002

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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 10-K

Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934  
For the fiscal year ended December 31, 2001

OR

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  
(State of other jurisdiction of  
incorporation or organization)

62-1413174  
(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 |
|---------------------|---|
| None                | None                                      |

Securities registered pursuant to Section 12(g) of the Act:

Title of each class  
Common Stock, \$.01 Par Value

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  No .

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K 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 .

Although it is difficult to determine the number of shares owned by non-affiliates, the Registrant estimates that the aggregate market value of the Common Stock on March 1, 2002 (based upon the closing price shown on the Nasdaq National Market on March 1, 2002) held by non-affiliates was approximately \$47,821,986. For this computation, the Registrant has excluded the

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market value of all shares of its Common Stock reported as beneficially owned by officers, directors and certain significant stockholders of the Registrant. Such exclusion shall not be deemed to constitute an admission that any such stockholder is an affiliate of the Registrant.

The number of shares of Common Stock, par value \$.01, of the Registrant outstanding as of March 1, 2002 was 17,636,465 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 2002 Annual Meeting of Stockholders are incorporated by reference into Items 11, 12 and 13 under Part III hereof.

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## PART I

### ITEM 1. BUSINESS

#### Overview

BioCryst Pharmaceuticals, Inc. is a biotechnology company focused on drug discovery and development of pharmaceuticals for the treatment of viral, inflammatory/autoimmune and cardiovascular diseases and disorders. Our most advanced drug candidate, peramivir (formerly referred to as RWJ-270201), is an influenza neuraminidase inhibitor designed to treat and prevent viral influenza.

#### Our Business Strategy

Our business strategy is to use structure-based drug design technologies to develop innovative, small-molecule pharmaceuticals to treat a variety of diseases and disorders. We focus our drug development efforts on building potent, selective inhibitors of enzymes associated with targeted diseases. Enzymes are proteins that cause or enable biological reactions necessary for the progression of the disease or disorder. The specific enzymes on which we focus are called enzyme targets. Inhibition of these enzyme targets might be effective in the treatment of infectious, autoimmune, inflammatory, cardiovascular and other diseases and disorders. Inhibition means interfering with the functioning of an enzyme target, thereby stopping or slowing the progression of the disease or disorder. The principal elements of our strategy are:

**Select and License Promising Enzyme Targets for the Development 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 developing small-molecule pharmaceuticals. We choose enzyme targets that meet as many of the following criteria as possible:

- serve important functions in disease pathways;
- have well-defined active sites;
- have known animal models that would be indicative of results in humans; and
- have the potential for short duration clinical trials.

**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.

**Develop 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, we 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.

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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 exclusively on our strongest areas of 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 include:

**Entering Into Relationships with Academic Institutions and Biotechnology Companies.** Many academic institutions and biotechnology companies perform extensive research on the molecular and structural biology of potential drug development targets. By entering into relationships with these institutions, we believe we can significantly reduce the time, cost and risks involved in drug target development. Our collaborative relationships with such organizations may lead to the licensing of one or more drug targets or compounds. Upon licensing a drug target from one of these institutions, the scientists from the institution typically become working partners as members of our structure-based drug design teams. We believe this makes us a more attractive development partner to these scientists. In addition, we collaborate with outside experts in a number of areas, including crystallography, molecular modeling, combinatorial chemistry, biology, pharmacology, oncology, cardiology, immunology and infectious diseases. These collaborations enable us to complement our internal capabilities without adding costly overhead. We believe this strategy allows us to save valuable time and expense, and further diversify and strengthen our portfolio of drug candidates. An example of such a collaborative relationship is the arrangement that we have with The University of Alabama at Birmingham, or UAB, which has resulted in the initiation of several of our early drug development programs.

**Licensing Drug Development Candidates to Other Parties.** We plan to advance drug candidates through initial and/or early-stage drug development, then license them to pharmaceutical or biotechnology partners for final development and global marketing. We believe partnerships are a good source of development payments, license fees, milestone 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 believe that focusing on discovery and early-stage drug development while benefiting from our partners' proven development and commercialization expertise will reduce our internal expenses and allow us to have a larger number of drug candidates progress to late-stage drug development.

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## Products in Development

The following table summarizes BioCryst's development projects as of March 1, 2002:

| PROGRAM AND CANDIDATE<br>DISEASE CATEGORY/INDICATION | DELIVERY<br>FORM | DEVELOPMENT<br>STAGE | WORLDWIDE<br>RIGHTS |
|--|------------------|----------------------|---------------------|
| Neuraminidase Inhibitor Peramivir                    | Oral             | Phase III            | BioCryst            |

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| <b>PROGRAM AND CANDIDATE<br/>DISEASE CATEGORY/INDICATION</b><br>(RWJ-270201) Viral/Influenza                               | <b>DELIVERY<br/>FORM</b> | <b>DEVELOPMENT<br/>STAGE</b> | <b>WORLDWIDE<br/>RIGHTS</b>     |
|--|--------------------------|------------------------------|---------------------------------|
| <b>PNP Inhibitor (BCX-1777)</b><br>Autoimmune, inflammation/<br>T-cell related diseases                                    | Intravenous              | Phase I/II                   | BioCryst                        |
| <b>Tissue Factor/VIIa Inhibitors</b><br>Cardiovascular/Acute coronary events,<br>anticoagulation                           | Intravenous/<br>oral     | Lead<br>Optimization         | BioCryst                        |
| <b>Complement Component C1s Inhibitors</b><br>Cardiovascular, inflammation/<br>Acute coronary events, rheumatoid arthritis | Intravenous              | Lead<br>Optimization         | BioCryst/3-D<br>Pharmaceuticals |
| <b>Hepatitis C Polymerase Inhibitors</b><br>Viral/Hepatitis C  | Oral                     | Lead<br>Optimization         | BioCryst                        |
| <b>Parainfluenza Hemagglutinin-<br/>Neuraminidase Inhibitors</b><br>Viral/Croup, viral pneumonia                           | Oral                     | Discovery                    | BioCryst                        |

**Neuraminidase Inhibitor Peramivir (RWJ-270201)**

*Influenza Background*

*Overview.* Influenza, commonly known as the flu, is perceived by many people as a transient, inconvenient viral infection that leaves its sufferers bedridden. 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 35 to 50 million Americans suffer from influenza annually.

The flu is particularly dangerous to the elderly, young children and debilitated patients. Flu and associated complications are the sixth leading cause of death in the United States accounting for approximately 20,000 deaths in the each year. A 1994 article in The New England Journal of Medicine estimated that the annual cost to the U.S. economy associated with influenza epidemics was in excess of \$12 billion.

*Symptoms and Treatment of Influenza.* Although influenza is considered a respiratory disease, flu sufferers usually become acutely ill with high fever, chills, headache, weakness, loss of appetite and aching joints. The flu sufferer may also have a sore throat, dry cough and burning eyes.

For most healthy children and adults, influenza is typically a moderately severe illness. However, for people with pre-existing medical conditions, influenza can be very severe and, in many cases, fatal. In these patients, bacterial infections may occur because the body's immune system is so weakened by influenza that its defenses against bacteria are low. Bacterial pneumonia is the most common complication of influenza.

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 are 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.

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 vaccine is inaccurate. In addition,

many people decline the required injections because of fear and/or discomfort. The ability of the virus to change its structure to avoid the body's natural defenses is a serious obstacle to developing an effective vaccine against influenza. 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. 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, both Hoffmann-La Roche, in collaboration with Gilead Sciences, and GlaxoSmithKline have neuraminidase inhibitors. Hoffmann-La Roche's neuraminidase inhibitor is a twice-a-day, orally active neuraminidase inhibitor, while GlaxoSmithKline'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. Hoffman-La Roche's neuraminidase inhibitor is also approved for prevention of influenza.

#### *Our Influenza Neuraminidase Inhibitor*

*Background.* In 1987, scientists at The University of Alabama at Birmingham, or 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.

By 1998, four patented compounds emerged as viable product development candidates. Preclinical studies determined the lead compound, peramivir, has the following benefits:

good safety profile;

inhibition of both influenza A and B;

effective when taken orally;

once-a-day dosage; and

can be made into a liquid form, allowing for use by the elderly and young children.

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*Previous Licensing History.* In September 1998, BioCryst entered a worldwide license agreement with The R.W. Johnson Pharmaceutical Research Institute (RWJPRI) and Ortho-McNeil Pharmaceutical Inc. (Ortho-McNeil) both Johnson & Johnson companies, for development and commercialization of our influenza neuraminidase inhibitors, including peramivir.

On April 30, 2001, BioCryst announced that Ortho-McNeil and RWJPRI, gave four months prior notice of termination of the worldwide license agreement with BioCryst to develop and market products to treat and prevent viral influenza. Subsequently, all rights to peramivir returned to BioCryst. Ortho-McNeil indicated that this business decision was not related to

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safety or efficacy of peramivir, but that other of its drug development programs were of a higher priority. The final termination of this agreement was effective on September 21, 2001.

### *Clinical Development Status*

*Phase II data Summary.* RWJPRI conducted two Phase II placebo-controlled, randomized studies for the treatment of healthy volunteers infected with a strain of either influenza A or influenza B. The primary endpoints were viral titers over time expressed as the area under the viral titer curve. Among infected subjects, peramivir produced a dose-dependent, anti-viral effect. In addition, oral, once daily peramivir was well tolerated and reported adverse events were similar for the active and placebo-treated groups.

*Phase III clinical trial Overview.* Phase III clinical trials of peramivir were initiated in Europe in February 2000 by RWJPRI. The trials were continued, but not completed, during the 2000-2001 season, and remain blinded. On January 3, 2002, BioCryst announced that patient enrollment began in the United States in the Phase III trial with once-a-day orally administered peramivir. The multicenter, Phase III clinical trial is designed to enroll approximately 1,300 healthy adults. Prior to the resumption of enrollment in the U.S., 1,036 patients had been enrolled to one of three treatment groups. Approximately 65 study sites across the United States are now open to enroll patients in the regions where influenza is present and localized outbreaks of influenza are documented. The multicenter, Phase III clinical trial will assess the efficacy and safety of peramivir for the treatment of acute influenza A and influenza B infections in otherwise healthy adults. The primary endpoint is the length of time from the first dose to the clinically significant relief of influenza symptoms. The ongoing Phase III clinical trial with peramivir should be finished by early spring, with analyzed results available during the third quarter 2002.

### **PNP Inhibitor (BCX-1777)**

#### *T-cell Related Diseases*

*Overview.* 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 produces selective suppression of T-cells without significantly impairing the function of other cells.

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, including T-cell cancers, occur.

*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 T-cells. Selective inhibition of PNP has an accumulation effect on certain nucleosides, including deoxyguanosine. As the concentration of deoxyguanosine increases within T-cells, it is converted by specific enzymes to deoxyguanosine triphosphate. A high concentration of deoxyguanosine triphosphate in T-cells blocks DNA synthesis and thus inhibits cell division.

#### *Our PNP Inhibitor*

*Background.* In June 2000, we licensed a series of potent inhibitors of purine nucleoside phosphorylase from Albert Einstein College of Medicine of Yeshiva University and Industrial Research, Ltd, New Zealand. The lead drug candidate from this collaboration, BCX-1777, is a more potent inhibitor of human lymphocyte proliferation than other known PNP inhibitors including our earlier PNP inhibitor, BCX-34. Extensive preclinical studies indicate that BCX-1777 can modulate T-cell activities in ways that we have never been able to achieve with BCX-34.

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#### *Current Development Strategy*

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*Overview.* The first clinical trial with an intravenous formulation of BCX-1777 is a Phase I/II clinical trial for patients with relapsed or refractory acute lymphoblastic leukemia (ALL) and T-cell lymphoma. BCX-1777 is an investigational PNP inhibitor for the potential treatment of T-cell mediated disorders, including T-cell cancers, psoriasis, and rheumatoid arthritis. The Phase I/II trial is an open-label dose-escalation study of BCX-1777 in relapsed or refractory aggressive T-cell malignancies.

*BCX-1777 Clinical Development for Aggressive T-cell Malignancies.* The Phase I/II clinical trial was developed in close collaboration with experts at The University of Texas M. D. Anderson Cancer Center. Despite encouraging results observed with other T-cell specific agents, the prognosis for patients with relapsed or refractory leukemia or lymphoma is poor and treatment options remain limited. The goal of the Phase I/II clinical trial is to determine the safety, biochemical and metabolic profile and therapeutic effect produced by BCX-1777 as it relates to the proposed mechanism of action in the inhibition of proliferating T-lymphocytes in patients with ALL or T-cell lymphoma.

*Acute Lymphoblastic Leukemia.* The most common form of leukemia in children is acute lymphoblastic leukemia (also known as ALL). According to the Leukemia & Lymphoma Society, 3,500 new cases (adult and children combined) will be diagnosed in the United States this year. 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. About 63,600 Americans were diagnosed with lymphoma in 2001. 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.

*BioCryst's PNP Experience.* When BioCryst was founded in 1986, we entered into an agreement with The University of Alabama in Birmingham that granted us exclusive rights to discoveries resulting from research relating to PNP. Through structure-based drug design, scientists at BioCryst designed our initial drug candidate, BCX-34, to suppress T-cell replication without significantly affecting other cells.

An oral formulation of BCX-34 was developed and clinical testing was initiated in 1996. Following clinical trials in patients with psoriasis, HIV and cutaneous T-cell lymphoma, we concluded that the dose levels of BCX-34 were inadequate to inhibit enough of the enzyme to affect T-cell numbers. These clinical trials, however, were effective in establishing the safety of BCX-34 at various dose levels and activity at the maximum oral dose absorbable by the body. Consequently, we discontinued further studies with BCX-34 in 2000 and we are currently moving forward with BCX-1777, which is 100 to 1000 times more potent than BCX-34 as measured by cell culture studies.

### **Tissue Factor/VIIa**

#### *Overview*

A series of complicated reactions take place in the body whenever a blood clot begins to form. The major initiator of these reactions is an enzyme system called the Tissue Factor/VIIa complex. Animal tests show that various inhibitors of the Tissue Factor/VIIa complex can minimize blood clot formation as well as blood vessel reactions. This sort of inhibition has been tested with a number of biological agents including the natural inhibitor of the pathway, various mutants of tissue factor and antibodies against VIIa. However, there are no small molecule drugs currently on the market that intervene at the Tissue Factor/VIIa level.

*Background.* We have an agreement with Sunol Molecular Corp. to expedite the discovery of new drug candidates designed to inhibit Tissue Factor/VIIa. Under the terms of this agreement, Sunol supplies us protein for our drug design program.

#### *Current Development Strategy*

Our Tissue Factor/VIIa inhibitor project has emerged as our highest priority discovery program. We have designed and synthesized a group of compounds that are potent and selective inhibitors of Tissue Factor/VIIa and further optimization is ongoing. Currently, we have identified three potential compounds for advanced preclinical evaluation. The goal is to advance

one compound into clinical development for treatment of an acute cardiovascular event during the next twelve months. During the first half of 2002, we plan to convene a cardiovascular advisory panel to discuss the program, lead optimization strategies, lead selection criteria, development plans and potential indications.

We believe that small molecule inhibitors of Tissue Factor/VIIa may potentially be useful for treating acute coronary syndromes and complications associated with cardiovascular procedures, such as coronary angioplasty and stent insertions, because any type of damage to arteries and blood vessels exposes tissue factor, which then triggers clot formation. Myocardial infarction, unstable angina, restenosis during and following angioplasty procedures, and sepsis are all potential treatment targets.

## **Complement Inhibitors**

### *Complement Cascade*

*Overview.* The human body is equipped with defense mechanisms that respond aggressively to infection or injury. This response is uniquely designed for each challenge, whether caused by viruses, bacteria, or other matter harmful to the body. One of these mechanisms, called the complement system, is a system of functionally linked proteins that interact with one another in a highly regulated manner.

The complement system functions as a cascade of enzymes that assist in the removal of bacteria or destruction of cells that the body does not recognize as its own. For example, once the immune system recognizes a foreign invader, complement is activated to destroy or remove it. There are two pathways of complement activation, the classical pathway and the alternative pathway. Antigen-antibody complexes usually initiate the classical pathway, while the alternative pathway is activated by bacterial, viral, parasite and membrane surfaces.

Complement is designed to keep us healthy by fighting infection and injury. However, this same mechanism, if inappropriately activated, can cause a significant amount of tissue damage as a result of the rapid and aggressive enzyme activity. The tissue damage can result in acute medical reactions, including inflammatory reactions that accompany post heart attack reperfusion injury. Due to the biochemical mechanism of the complement cascade, BioCryst believes complement inhibitors may have therapeutic applications in several acute and chronic immunological disorders.

### *Our Complement Inhibitors*

*Background.* In October 1996, we established a collaborative drug discovery effort with 3-Dimensional Pharmaceuticals, Inc. in Philadelphia. Then, in 1997, working closely with scientists at UAB, we characterized the three-dimensional structure of one of the components of the complement cascade. Using X-ray crystallographic and molecular modeling techniques, we then designed and synthesized a class of small molecule compounds that are highly potent inhibitors of complement and certain other blood enzymes. However, these compounds had to be administered at concentrations that were too close to toxicologic limits in order to be used clinically. Discovery work continues to design and develop small molecule inhibitors to block activation of the complement cascade.

### *Current Development Strategy*

BioCryst and 3-Dimensional Pharmaceuticals, Inc., have developed a number of small molecule compounds that have potent activity against the complement enzyme C1s. Lead optimization is underway with a select group of inhibitors to identify a promising candidate for preclinical testing. We expect to advance a lead candidate during 2002 and hope to file an Investigational New Drug application with the Food and Drug Administration within the next twelve months. The goal is to pursue a development path to address reperfusion injury. Other therapeutic opportunities include rheumatoid arthritis, lupus, and psoriasis.



## Hepatitis C

### *Overview*

Hepatitis C virus (HCV) infection has been described in the New England Journal of Medicine as the nation's most common chronic blood-borne infection. Up to 3% of the world population has been infected with the Hepatitis C virus. According to the National Centers for Disease Control, as many as 75% of those infected with the Hepatitis C virus will develop liver disease. While there are several approved treatments for chronic Hepatitis C using a combination therapy of interferon and ribavirin, there are some potentially severe side effects to these treatments.

*Background.* In June 2000, we licensed intellectual property from Emory University related to the Hepatitis C polymerase target associated with Hepatitis C viral infections. Under the terms of the agreement, the research investigators from Emory provide us with materials and technical insight into the target.

### *Current Development Strategy*

We are targeting HCV polymerase through collaborative and in-house efforts. Specifically, we are focused on development of orally active inhibitors against the RNA-dependent RNA polymerase. Competition for this target is less intense than for the HCV protease target and history suggests the likelihood of designing an inhibitor against this target is better than for the more difficult serine protease.

Currently, we are screening a number of potential compounds against HCV polymerase. Specifically, our scientists are measuring the potency and ability of potential drug candidates to block the replication of HCV polymerase *in vitro*, or in test tubes. These experiments measure the potency of each selected compound's ability to block replication. Advanced screening is also underway to measure the fit of promising compounds in the HCV polymerase active site using X-ray crystallography and computer molecular modeling. The goal is to identify a series of compounds that are potent *in vitro* inhibition of the active site of the HCV polymerase for further testing and lead optimization.

## Parainfluenza Hemagglutinin-Neuraminidase

### *Overview*

The parainfluenza virus, or PIV, affects approximately five million infants, children and adults each year in the United States. The most common illness in children is an acute febrile respiratory infection. In its usual setting, hoarseness, croup, fever and a persistent cough develop, while young children and immunosuppressed adults can develop bronchitis and bronchial pneumonia. In the United States each year, approximately 70,000 children are hospitalized due to severe complications of parainfluenza virus infections.

PIVs are negative-sense, single-stranded RNA viruses that possess two surface glycoproteins, hemagglutinin-neuraminidase, or HN and fusion F, or "spikes" on their surface. There are four types of PIV (1 through 4) and two subtypes (4a and 4b) that cause infection. PIV is spread from respiratory secretions through close contact with infected persons or contact with contaminated surfaces or objects. Research suggests that parainfluenza virus infection and further spread of the virus could be prevented by blocking a single site on the surface of the virus HN—hemagglutinin-neuraminidase. The importance of HN in the life cycle and pathogenesis of PIV has been studied extensively. HN has three important functions:

recognizes and binds sialic acid containing receptors on cell surfaces;

mediates the fusion activity of the F protein for the viral entry into the host cell; and

catalyzes the removal of sialic acid from progeny virus particles to prevent viral self-agglutination.

*Background.* In October 1999, we entered into an agreement with St. Jude Children's Research Hospital in Tennessee, University of Bath in England and University of St. Andrews in Scotland for research and development related to PIV. Under the agreement, these universities will provide us with protein and do selected work on X-ray crystallography which will aid in the design of appropriate inhibitors.

### *Current Development Strategy*

Scientists at BioCryst have developed several potential compounds with potent activity against human PIV. In addition, we are working to develop animal models of the human viral disease. These disease models are important for further preclinical evaluation and our ability to assess safety and efficacy early on in the course of our studies.

### **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.

During the years ended December 31, 1999, 2000 and 2001, we spent an aggregate of \$30.4 million on research and development. Approximately \$22.2 million of that amount was spent on in-house research and development, and \$8.2 million was spent on contract research and development.

### **Collaborative Relationships**

#### *Corporate Alliances*

##### *3-Dimensional Pharmaceuticals, Inc.*

In October 1996, we signed a research collaboration agreement with 3-Dimensional Pharmaceuticals. Under this agreement, the companies will share resources and technology to expedite the discovery of new drug candidates for our complement inhibition program. The agreement combines our capabilities in structure-based drug design with the selection power of 3-Dimensional Pharmaceuticals' Directed Diversity® technology, a proprietary method of directing combinatorial chemistry and high throughput screening toward specific molecular targets. In June 1999, we updated and renewed our original agreement to concentrate on selected complement enzymes as targets for the design of inhibitors. Under the terms of the 50-50 agreement, we conduct joint research to identify inhibitors of key serine proteases, which represent promising targets for inhibition of complement activation. If a drug candidate emerges as a result of the joint research, the companies will negotiate the product development and commercialization rights and responsibilities.

*Novartis AG*

In 1990, we entered into an exclusive worldwide license agreement with Novartis AG, formerly Ciba-Geigy, for use of certain of our PNP inhibitors, not including BCX-34. We received an initial \$500,000 payment from Novartis, up to \$300,000 of which is refundable in circumstances specified in the agreement. The agreement also provides for Novartis to pay us royalties on sales, if any, of the PNP inhibitors. We may never receive any revenue based on this license agreement.

*Sunol Molecular Corp.*

In April 1999, we entered into an agreement with Sunol. This agreement requires Sunol to conduct research and supply us with protein targets for drug design to expedite the discovery of new drug candidates designed to inhibit Tissue Factor/VIIa for our cardiovascular program.

**Academic Alliances**

*The University of Alabama at Birmingham*

We have had a close relationship with The University of Alabama at Birmingham, or UAB, since our formation. Our Chairman and Chief Executive Officer, Dr. Charles E. Bugg, was the previous Director of the UAB Center for Macromolecular Crystallography, and our President and 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 consultants are employed by UAB. UAB has one of the largest X-ray crystallography centers in the world with approximately 140 full-time staff members and approximately \$18.9 million in research grants and contract funding in 2001. Three of our early programs, PNP, influenza neuraminidase and complement inhibitors, originated at UAB.

When we were founded in 1986, we entered into an agreement with UAB that granted us exclusive rights to discoveries resulting from research relating to PNP. We also entered into an agreement with UAB that gives us the first option to obtain a non-exclusive license to patents and copyrights of UAB not developed in collaboration with us or an exclusive license, in some cases worldwide, to patents, copyrights or intellectual property arising from research of UAB collaborators or investigators under contract to us. Subsequently, we entered into 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 royalties on sales of any resulting product and to share in future payments received from other third-party collaborators. UAB received a portion of license fees and milestone payments we received from RWJPRI and Ortho-McNeil for our former influenza collaboration. UAB will receive a portion of any future license fees, milestone payments and royalties we receive from a future partner for the influenza collaboration. We have completed the research under the UAB influenza agreement. We are continuing to fund the research program under the complement inhibitors agreement, which entitles us to an assignment of, or a right to an exclusive license for, any inhibitors of specified complement enzymes developed by UAB scientists during the period of support or for a one-year period thereafter. 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-month's notice and by UAB under certain circumstances.

*St. Jude Children's Research Hospital, University of Bath and University of St. Andrews*

In October 1999, we entered into an agreement with St. Jude Children's Research Hospital in Tennessee, University of Bath in England and University of St. Andrews in Scotland for research and development related to the parainfluenza virus, or PIV. Under the agreement, these organizations will provide us with biological samples and scientific data that will form the basis for our design and development of potential drug candidates for the treatment of PIV. Under the terms of these agreements, these organizations perform specific research for us in return for research payments and license fees. These organizations have granted us certain rights to any discoveries in these areas resulting from research developed by them or jointly developed with us. We have agreed to pay certain royalties on sales of any resulting product and to share in future payments received from other third-party collaborators, if any.

*Albert Einstein College of Medicine of Yeshiva University and Industrial Research, Ltd, New Zealand*

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In June 2000, we licensed a series of potent inhibitors of purine nucleoside phosphorylase, or PNP, from Albert Einstein College of Medicine of Yeshiva University and Industrial Research, Ltd, New Zealand. The lead drug candidate from this collaboration is BCX-1777. We have the rights to develop and ultimately distribute this, or any other, drug candidate that might arise from research on these inhibitors. We have agreed to pay certain milestone payments for future development of these inhibitors, pay certain royalties on sales of any resulting product, and to share in future payments received from other third-party collaborators, if any.

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### *Emory University*

In June 2000, we licensed intellectual property from Emory University related to the Hepatitis C polymerase target associated with Hepatitis C viral infections. Under the terms of the agreement, the research investigators from Emory provide us with materials and technical insight into the target. We have agreed to pay Emory royalties on sales of any resulting product and to share in future payments received from other third party collaborators, if any.

### **Previous Licensing History**

#### *The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil Pharmaceutical, Inc.*

In 1998, we entered into an exclusive worldwide license agreement with RWJPRI and Ortho-McNeil to develop and market our proprietary influenza neuraminidase inhibitors to treat and prevent viral influenza. We received an initial \$6.0 million payment from Ortho-McNeil and an additional \$6.0 million common stock equity investment from Johnson & Johnson Development Corporation. In June 1999, we received a \$2.0 million milestone payment from Ortho-McNeil in connection with the initiation of Phase II clinical testing in the United States. In February 2000, BioCryst received a \$4.0 million milestone payment from RWJPRI in connection with the initiation of Phase III clinical trials of peramivir (RWJ-270201) in North America and Europe.

On April 30, 2001, we announced that Ortho-McNeil and RWJPRI gave four months prior notice of termination of the worldwide license agreement with BioCryst to develop and market products to treat and prevent viral influenza. The drug candidate, peramivir, was in Phase III clinical trials, which are still blinded. Ortho-McNeil indicated that this business decision was not related to the safety or efficacy of the drug, but that other of its drug development programs were of a higher priority.

### **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.

As of March 1, 2002, we have been issued several U.S. patents that expire between 2009 and 2015 and relate to our PNP inhibitor compounds. We have also filed a patent application for new processes to prepare certain PNP inhibitors, and an application related to our PNP inhibitor compounds. The following patent applications are still pending: six U.S. patent applications, and a patent cooperation treaty (PCT) application related to our neuraminidase inhibitors and/or methods of preparation; an application related to compounds and methods for detecting influenza virus; a U.S. application and a PCT application relating to inhibiting T-cell proliferation; and a US application related to deazaguanine analogs, a U.S. application, a provisional U.S. patent application and a PCT application related to paramyxovirus neuraminidase; a U.S. application, two provisional U.S. patent applications and a PCT application related to serine protease inhibitors; and 4 provisional U.S. applications related to RNA viral polymerase 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 available.

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 collaborators to enter into

### **Academic Alliances**

confidentiality agreements which prohibit the disclosure of confidential information to anyone outside of our company and 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.

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## Marketing and Sales

We lack experience in marketing, distributing and selling pharmaceutical products. Our strategy is to rely on collaborators, licensees or arrangements with others to provide for the marketing, distribution and sales of any products we may develop. We may not be able to establish and maintain acceptable commercial arrangements with collaborators, licensees or others to perform such activities.

If approved, peramivir will likely be the third influenza neuraminidase inhibitor to the market behind the influenza neuraminidase inhibitors currently marketed by GlaxoSmithKline and Hoffmann-LaRoche, in collaboration with Gilead Sciences. We believe this may provide marketing challenges. However, we believe that there may be some advantages to not being first to market. We expect that both GlaxoSmithKline and Hoffmann-La Roche will play a major role in establishing the influenza treatment market and creating a demand for neuraminidase inhibitors on which a future partner will be able to capitalize if our neuraminidase inhibitor is approved for marketing. Because neuraminidase inhibitors represent a new class of drugs that could impact a large number of people, a major education effort will be required to promote acceptance by both the treating physicians and the target population.

## 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 infectious, inflammatory and cardiovascular diseases and 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. In addition, 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 and complement inhibitors, Hepatitis C, Tissue Factor VIIa, and parainfluenza. In addition, we are aware that other companies or institutions are pursuing development of new drugs and technologies directly targeted at applications for which we are developing our drug compounds. For example, GlaxoSmithKline's influenza neuraminidase inhibitor has received approval from the FDA to market their inhibitor in the United States and other countries. This product is administered in the form of a dry-powder inhaler, which could be difficult to use in some cases and may cause patient discomfort. The FDA also approved the influenza neuraminidase inhibitor developed by Hoffmann-La Roche, in collaboration with Gilead Sciences. We believe this may provide marketing challenges.

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 United States, 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, 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:

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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 licensees 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 investigational new drug application, including a proposal to begin clinical trials, with the FDA. We have filed nine investigational new drug applications to date and plan to file, or rely on certain partners to file, additional investigational new drug applications in the future. Thirty days after filing an investigational new drug application, 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 licensees 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 for treatment of a particular disease.

Initiation and completion of the clinical trial phases is dependent on several factors including things that are beyond our control. For example, the clinical trials are dependent on patient enrollment, but the rate at which patients enroll in the study depends on:

the size of the patient population we intend to treat;

the availability of patients;

the willingness of patients to participate; and

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the patient 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 licensees must submit a new drug application 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 a 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 collaborators 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 March 1, 2002, we had 77 employees, of whom 61 were engaged in research and development and 16 were in general and administrative functions. Our scientific staff, 30 of whom hold Ph.D. or M.D. degrees, has diversified experience in biochemistry, pharmacology, X-ray crystallography, synthetic organic chemistry, computational chemistry, and medicinal chemistry. We consider our relations with our employees to be satisfactory.

**Scientific Advisory Board and Consultants**

Our scientific advisory board is comprised of five scientific advisors who are leaders in certain of our core disciplines or who otherwise have specific expertise in our therapeutic focus areas. We also have consulting agreements with a number of other scientists with expertise in our core disciplines or who are specialists in diseases or treatments on which we focus. The scientific advisory board meets as a group at scheduled meetings and the consultants meet more frequently, on an individual basis, with our scientific personnel and management to discuss our ongoing research and drug discovery and development projects. The scientific advisory board consists of the following individuals:

| Name                                | Position  |
|-------------------------------------|---|
| Albert F. LoBuglio, M.D. (Chairman) | Professor of Medicine and the Director of The University of Alabama at Birmingham Comprehensive Cancer Center.  |
| Gordon N. Gill, M.D.                | Professor of Medicine and Chair of the Faculty of Basic Biomedical Sciences at the University of California, San Diego School of Medicine.                  |
| Lorraine J. Gudas, Ph.D.            | Professor and Chairman of the Department of Pharmacology of Cornell Medical College and the Revlon Pharmaceutical Professor of Pharmacology and Toxicology. |
| Herbert A. Hauptman, Ph.D.          |   |

| Name                    | Position   |
|-------------------------|--|
| Hamilton O. Smith, M.D. | President of the Hauptman-Woodward Medical Research Institute, Inc. (formerly the Medical Foundation (Buffalo), Inc.), and Research Professor in Biophysical Sciences at the State University of New York (Buffalo). Recipient of the Nobel Prize in Chemistry (1985).<br><br>Director of DNA Resources at Celera Genomics Corporation, and Professor, Molecular Biology and Genetics Department at The Johns Hopkins University School of Medicine, retired. Recipient of the Nobel Prize in Medicine (1978). |

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The scientific advisors and the consultants are reimbursed for their expenses and receive nominal cash compensation in connection with their service and have been issued options and/or shares of common stock. The scientific advisors and the consultants are all employed by or have consulting agreements with entities other than us, some of which may compete with us in the future. The scientific advisors and the consultants are expected to devote only a small portion of their time to our business, although no specific time commitment has been established. They are not expected to participate actively in our affairs or in the development of our technology. Several of the institutions with which the scientific advisors and the consultants are affiliated may adopt new regulations or policies that limit the ability of the scientific advisors and the consultants to consult with us. The loss of the services of the scientific advisors and the consultants could adversely affect us to the extent that we are pursuing research or development in areas relevant to the scientific advisors' and consultants' expertise. To the extent members of our scientific advisory board or the consultants have consulting arrangements with or become employed by any of our competitors, we could be materially adversely affected.

Any inventions or processes independently discovered by the scientific advisors or the consultants may not become our property and will probably remain the property of such persons or of such persons' employers. In addition, the institutions with which the scientific advisors and the consultants are affiliated may make available the research services of their personnel, including the scientific advisors and the consultants, to our competitors pursuant to sponsored research agreements. We require the scientific advisors and the consultants to enter into confidentiality agreements which prohibit the disclosure of confidential information to anyone outside of our company and require disclosure and assignment to us of their ideas, developments, discoveries or inventions. However, our competitors may gain access to trade secrets and other proprietary information developed by us and disclosed to the scientific advisors and the consultants.

## ITEM 2. PROPERTIES

Our administrative offices and principal research facility are located in 57,350 square feet of leased office space in Riverchase Industrial/Research Park in Birmingham, Alabama. The lease runs through June 30, 2010 with an option to lease for an additional five years at current market rates. We believe that our facilities are adequate for our current operations.

## ITEM 3. LEGAL PROCEEDINGS

None.

## ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.





**December 31,**  
**(Dollars in thousands)**

| Cash, cash equivalents and securities | \$ 52,941 | \$ 65,583 | \$ 70,047 | \$ 27,012 | \$ 24,643 |
|---------------------------------------|-----------|-----------|-----------|-----------|-----------|
| Total assets                          | 59,096    | 70,826    | 73,387    | 29,100    | 26,485    |
| Accumulated deficit                   | (75,031)  | (70,045)  | (58,467)  | (53,170)  | (48,384)  |
| Total stockholders' equity            | 16,56,814 | 61,481    | 71,403    | 27,682    | 25,285    |

## 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 the Company. 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 the Company with the Securities and Exchange Commission.*

### Overview

Since our inception in 1986, we have been engaged in research and development activities and organizational efforts, including:

- identification and licensing of enzyme targets;
- drug discovery;
- structure-based design of drug candidates;
- small-scale synthesis of compounds;
- conducting preclinical studies and clinical trials;
- recruiting our scientific and management personnel;
- establishing laboratory facilities; and
- raising capital.

Our revenues have generally been limited to license fees, milestone payments, interest income, collaboration research and development fees. Prior to January 1, 2000, the Company recognized research and development fees, license fees and milestone payments as revenue when received. Effective January 1, 2000, the Company changed its method of accounting for revenue recognition in accordance with SEC Staff Accounting Bulletin No. 101, *Revenue Recognition in Financial Statements* (SAB 101). Research and development revenue on cost-reimbursement agreements is recognized as expenses are incurred, up to contractual limits. Research and development fees, license fees and milestone payments are recognized as revenue when the earnings process is complete, the Company has no further continuing performance obligations and has completed its performance under the terms of the agreement, in accordance with SAB 101. License fees and milestone payments received under licensing agreements that are related to future performance are deferred and taken into income as earned over the estimated drug development period. The Company has not received any royalties from the sale of licensed pharmaceutical products. It could be several years, if ever, before we will recognize significant revenue from royalties received pursuant to our license agreements, and we do not expect to ever generate revenue directly from product sales. Future revenues, if any, are likely to fluctuate substantially from quarter to quarter.

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We have incurred operating losses since our inception. Our accumulated deficit at December 31, 2001 was \$75.0 million. We will require substantial expenditures relating to the development of our current and future drug candidates. During the three years ended December 31, 2001, we spent 26.9% of our research and development expenses on contract research and development, including:

- payments to consultants;
- funding of research at academic institutions;
- large scale synthesis of compounds;

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- preclinical studies;
  - engaging investigators to conduct clinical trials;
  - hiring contract research organizations to monitor and gather data on clinical trials; and
  - using statisticians to evaluate the results of clinical trials.

The above expenditures for contract research and development for our current and future drug candidates will vary from quarter to quarter depending on the status of our research and development projects. For example, in September 1998, we entered a worldwide license agreement with The R.W. Johnson Pharmaceutical Research Institute (RWJPRI) and Ortho-McNeil Pharmaceutical, Inc. (Ortho-McNeil), both Johnson & Johnson companies, to develop and market products to treat and prevent viral influenza. On April 30, 2001, we announced that Ortho-McNeil and RWJPRI gave BioCryst four months prior notice of termination of the worldwide license agreement. The final termination of this agreement was effective on September 21, 2001. Subsequently, we decided to move forward in the United States to complete the Phase III clinical trial of peramivir that was initiated in Europe in February 2000, while we seek a new development partner.

Changes in our existing and future research and development and collaborative relationships will also impact the status of our research and development projects. Although we may, in some cases, be able to control the timing of development expenses, in part by accelerating or decelerating certain of these costs, many of these costs will be incurred irrespective of whether or not we are able to discover drug candidates or obtain collaborative partners for commercialization. As a result, we believe that quarter-to-quarter comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of future performance. If we fail to meet the research, clinical and financial expectations of securities analysts and investors, it could have a material adverse effect on the price of our common stock.

### **Year Ended December 31, 2001 Compared with the Year Ended December 31, 2000**

Collaborative and other research and development revenue increased 133.4% to \$7,736,976 in 2001 from \$3,315,594 in 2000, primarily due to a change in accounting estimate following Ortho-McNeil and RWJPRI's notice of termination of the worldwide license agreement with us to develop and market products to treat and prevent viral influenza. As a result of this termination, we recognized all remaining deferred revenues and expenses related to this agreement during the second and third quarters of 2001. The deferred revenues from this agreement had been recorded as a result of the implementation of SAB 101 in the first quarter of 2000. Interest and other income decreased 21.3% to \$3,420,658 in 2001 from \$4,345,761 in 2000, primarily due to the reduction in cash from the expansion of our facilities and the funding of operations.

Research and development expenses increased 36.5% to \$13,091,057 in 2001 from \$9,590,352 in 2000. The increase in expenses is primarily attributable to increased facilities expenses resulting from the expansion of our facilities during 2000 and the related increases in personnel during 2000 and 2001, plus the additional clinical trial expenses associated with the continuing Phase III development of peramivir.

General and administrative expenses decreased 23.8% to \$2,608,392 in 2001 from \$3,424,483 in 2000. The decrease is primarily due to a reduction in stockholder expenses and the reduced Alabama share tax assessment in 2001. Royalty expense

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increased 234.2% to \$443,697 in 2001 from \$132,773 in 2000. This increase is directly attributable to the change in accounting estimate resulting from the termination of our worldwide license agreement by Ortho-McNeil and RWJPRI for our neuraminidase inhibitor, peramivir.

### **Year Ended December 31, 2000 Compared with the Year Ended December 31, 1999**

Collaborative and other research and development revenue increased 32.6% to \$3,315,594 in 2000 from \$2,499,679 in 1999, primarily due to a \$0.7 million payment received for contract research work performed in 2000. Litigation settlement declined by \$1.2 million in 2000, due to the settlement of a lawsuit in 1999 concerning a misfiling of a foreign patent by the Company's former patent counsel. Interest and other income increased 166.8% to \$4,345,761 in 2000 from \$1,629,046 in 1999, primarily due to the reinvestment of funds from the November 1999 \$46.8 million follow-on equity offering.

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Research and development expenses increased 24.8% to \$9,590,352 in 2000 from \$7,682,862 in 1999. The increase is primarily attributable to an increase in contracted research costs at various institutions, supplies, personnel and preclinical work performed on current targets. These increases were partially offset by a decrease in costs associated with conducting clinical trials. These costs tend to fluctuate from period to period depending upon the status of the Company's research projects and collaborative efforts.

General and administrative expenses increased 25.0% to \$3,424,483 in 2000 from \$2,738,494 in 1999. The increase was primarily the result of increased personnel costs and a new Alabama share tax assessment, partially offset by a reduction in legal expenses.

### **Liquidity and Capital Resources**

Cash expenditures have exceeded revenues since the Company's inception. Our operations have principally been funded through various sources, including the following:

- public offerings and private placements of equity and debt securities,
- equipment lease financing,
- facility leases,
- collaborative and other research and development agreements (including licenses and options for licenses),
- research grants and
- interest income.

In addition, 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 expand our research and development activities and undertake additional preclinical studies and clinical trials of compounds, which have been or may be discovered. We also expect to incur substantial expenses related to the filing, prosecution, maintenance, defense and enforcement of patent and other intellectual property claims.

The Company invests its excess cash principally in U.S. marketable securities from a diversified portfolio of institutions with strong credit ratings and in U.S. government and agency bills and notes, and by policy, limits the amount of credit exposure at any one institution. These investments are generally not collateralized and primarily mature within less than four years. The Company has not realized any losses from such investments. In addition, at December 31, 2001, approximately \$15.2 million was invested in the Merrill Lynch Premier Institutional Fund, which invests primarily in commercial paper, U.S. government and agency bills and notes, corporate notes, certificates of deposit and time deposits. The Merrill Lynch Premier Institutional Fund is not insured. At December 31, 2001, our cash, cash equivalents and securities held-to-maturity were \$52.9

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million, a decrease of \$12.6 million from December 31, 2000, principally due to the funding of current operations, which includes continuing Phase III development of peramivir and the expansion of our facilities.

We have financed some of our equipment purchases with lease lines of credit. We currently have a \$500,000 general line of credit with our bank, secured by a pledge of \$600,000 in marketable securities. There was nothing drawn against this line as of December 31, 2001. In July 2000, we renegotiated our lease for our current facilities, which will expire on June 30, 2010. We have an option to renew the lease for an additional five years at current market rates. The lease, as amended effective July 1, 2001 for an additional 7,200 square feet, requires us to pay monthly rent starting at \$33,145 per month in July 2001 and escalating annually to a minimum of \$47,437 per month in the final year, plus our pro rata share of operating expenses and real estate taxes in excess of base year amounts. As part of the lease, we have pledged a U.S. Treasury security deposited in escrow for the payment of rent and performance of other obligations specified in the lease. This pledged amount is currently \$455,000, which will be decreased by \$65,000 annually throughout the term of the lease.

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During 2000, we remodeled our facilities to gain additional laboratory space, update our existing laboratories, and add a small good manufacturing practices (GMP) clean room. In addition, we updated our general office facility to provide for growth and efficiencies. The total cost of these changes, including furniture and laboratory equipment, was approximately \$2.7 million. This phase of remodeling was completed in December 2000. Another phase of remodeling was completed in February 2002 for approximately \$2.6 million to add two chemistry laboratories and purchase additional equipment. Currently, there are no immediate plans for additional remodeling.

At December 31, 2001, we had long-term operating lease obligations, which provide for aggregate minimum payments of \$567,123 in 2002, \$580,803 in 2003 and \$594,897 in 2004. These obligations include the future rental of our operating facility.

In September 1998, we entered a worldwide license agreement with RWJPRI and Ortho-McNeil, both Johnson & Johnson companies, to develop and market products to treat and prevent viral influenza. Under the terms of the agreement, we received \$6.0 million in cash up front, and \$6.0 million from Johnson & Johnson Development Corporation in the form of a common stock equity investment in 1998, and milestone payments of \$2.0 million and \$4.0 million in 1999 and 2000, respectively. On April 30, 2001, we announced that Ortho-McNeil and RWJPRI gave four months prior notice of termination of the worldwide license agreement. Subsequently, all rights to peramivir and all other patented compounds were returned to the Company. Ortho-McNeil indicated that this business decision was not related to safety or efficacy of the drug, but that other of its drug development programs were of a higher priority. The final termination of this agreement was effective on September 21, 2001. Subsequently, we decided to move forward in the United States to complete the Phase III clinical trial of peramivir that was initiated in Europe in February 2000, while we seek a new development partner.

During this clinical trial we will spend approximately \$7 to \$9 million more than our normal annual operating expenses. If we are able to find a new corporate partner to continue and complete the development of peramivir, our future costs associated with this drug will be limited. We cannot assure you that we will find a new corporate partner that will continue to develop the product, or, if they do so, that such development will result in receiving milestone payments, obtaining regulatory approval, or achieving future royalties from sales of licensed products.

We plan to finance our needs principally from the following:

- our existing capital resources and interest earned on that capital;
- payments under collaborative and licensing agreements with corporate partners; and
- through lease or loan financing and future public or private financing.

We believe that our available funds will be sufficient to fund our operations at least through 2004. 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:

- the progress of our research, drug discovery and development programs;

changes in existing collaborative relationships;

our ability to establish additional collaborative relationships;

the magnitude of our research and development programs;

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the scope and results of preclinical studies and clinical trials to identify drug candidates;

competitive and technological advances;

the time and costs involved in obtaining regulatory approvals;

the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims;

our dependence on others for development and commercialization of our product candidates, in particular, peramivir, our influenza neuraminidase inhibitor, and

successful commercialization of our products consistent with our licensing strategy.

Additional funding, whether through additional sales of securities or collaborative or other arrangements with corporate partners or from other sources, 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.

### **Critical Accounting Policies**

We have established various accounting policies that govern the application of accounting principles generally accepted in the United States in the preparation of our financial statements. Our significant accounting policies are described in the footnotes to the 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 assets and liabilities and the results of operations.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our financial statements.

#### *Revenue Recognition*

Effective January 1, 2000, we changed our method of accounting for revenue recognition in accordance with SEC Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements ( SAB 101 ). Research and development revenue on cost-reimbursement agreements is recognized as expenses are incurred, up to contractual limits. Research and development fees, license fees and milestone payments are recognized as revenue when the earnings process is complete, the Company has no further continuing performance obligations and has completed its performance under the terms of the agreement, in accordance with SAB 101. License fees and milestone payments received under licensing agreements that are related to future performance are deferred and taken into income as earned over the estimated drug development period. Recognized revenues and profit are subject to revisions as these contracts or agreements progress to completion. Revisions to revenue or profit estimates are charged to income in the period in which the facts that give rise to the revision became known.

*Valuation of Financial Instruments*

We carry our held-to-maturity securities at amortized cost, as adjusted for other-than-temporary declines in market value. In determining if and when a decline in market value below amortized cost is other-than-temporary, we evaluate the market conditions and other key measures for our held-to-maturity investments. Future adverse changes in market conditions could result in losses or an inability to recover the carrying value of the held-to-maturity investments that may not be reflected in an investment's current carrying value, thereby possibly requiring an impairment charge in the future.

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*Deferred Taxes*

We have not had taxable income since incorporation and, therefore, we have not paid any income tax. We have deferred tax assets related to net operating loss carryforwards and research and development carryforwards. We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. While we have considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance, in the event we were to determine that we would be able to realize the deferred tax assets in the future in excess of the net recorded amount, an adjustment to the deferred tax asset would increase income in the period such determination was made. Likewise, should we determine that we would not be able to realize all or part of the net deferred tax asset in the future, an adjustment to the deferred tax asset would be charged to income in the period such determination was made.

**Certain Risk Factors That May Affect Future Results, Financial Condition and the Market Price of Securities**

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

Since our inception in 1986, we have not been profitable. We expect to incur additional losses for the foreseeable future, and our losses could increase as our research and development efforts progress. As of December 31, 2001, our accumulated deficit was approximately \$75.0 million. To become profitable, we must successfully develop drug candidates, enter into profitable agreements with other parties and our drug candidates must receive regulatory approval. These other parties must then successfully manufacture and market our drug candidates. It could be several years, if ever, before we receive royalties from any future license agreements. In addition, we never expect to generate revenue directly from product sales. If we do not generate revenue, or if our drug development expenses increase, we may need to raise additional funds through new or existing collaborations or through private or public equity or debt financing. If financing is not available on acceptable terms or not available at all, we may not have enough capital to continue our current business strategy.

***Because Ortho-McNeil Pharmaceutical, Inc. (Ortho-McNeil) and The R.W. Johnson Pharmaceutical Research Institute (RWJPRI) terminated their worldwide license agreement with us, our future revenue generation is uncertain***

On April 30, 2001, we announced that Ortho-McNeil and RWJPRI gave BioCryst four months prior notice of termination of the worldwide license agreement with us to develop and market products to treat and prevent viral influenza. The final termination of this agreement was effective on September 21, 2001. As a result, we have lost a substantial amount of our expected revenue. After applying SAB 101 on a pro forma basis, approximately 69.3% of our revenues for the year ended December 31, 2001; approximately 43.3% of our revenues for the year ended December 31, 2000 and approximately 40.6% of our revenues for the year ended December 31, 1999 resulted from this license agreement. These revenues represent approximately 39.7% of our total revenues since our inception in 1986. Because of the termination of this agreement, we will not receive any future milestone or other payments from RWJPRI or Ortho-McNeil.

***If our development collaborations with other parties fail, the development of our drug candidates will be delayed or stopped***

We rely completely upon other parties for many important stages of our drug development programs, including:

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

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

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manufacturing, sales, marketing and distribution of our drug candidates.

Our failure to engage in successful collaborations at any one of these stages would greatly impact our business. For example, we cannot assure you that we will license our proprietary influenza neuraminidase inhibitor peramivir to a new corporate partner to facilitate final development and potential commercialization on acceptable terms, if at all. If we do not license enzyme targets 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 breached their obligations to us, this would delay or prevent the development of our drug candidates.

Even more critical to our success is our ability to enter into successful collaborations for the late-stage clinical development, regulatory approval, manufacturing, marketing, sales and distribution of our drug candidates. Our strategy is to rely upon other parties for all of these steps so that we can focus exclusively on the key areas of our expertise. This heavy reliance upon third parties for these critical functions presents several risks, including:

these contracts may expire or the other parties to the contract may terminate them;

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;

our partners may not devote sufficient capital or resources towards our drug candidates; and

our partners may not comply with applicable government regulatory requirements.

Any problems encountered with our current or future partners could delay or prevent the development of our compounds, which would severely affect our business, because if our compounds do not reach the market in a timely manner, or at all, we will experience a significant decrease in milestone payments received by us and may never receive any royalty payments.

***If the clinical trials of our drug candidates fail, our drug candidates will not be marketed, which would result in a decrease in, or complete absence of, revenue***

To receive the regulatory approvals necessary for the sale of our drug candidates, we or our licensees must demonstrate through preclinical studies and clinical trials that each drug candidate is safe and effective. If we or our licensees are unable to demonstrate that our drug candidates are safe and effective, our drug candidates will not receive regulatory approval and will not be marketed, which would result in a decrease in, or complete absence of, revenue. The clinical trial process is complex and uncertain. Positive results from preclinical studies and early clinical trials do not ensure positive results in clinical trials designed to permit application for regulatory approval, called pivotal clinical trials. We may suffer significant setbacks in pivotal clinical trials, even after earlier clinical trials show promising results. Any of our drug 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 drug candidate. These side effects could also result in the FDA or foreign regulatory authorities refusing to approve the drug candidate for any targeted indications. We, our licensees, 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 drug candidates are safe or effective.

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



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In 1998, we signed an agreement to license our flu drug candidate to Ortho-McNeil and to RWJPRI, who conducted clinical trials. On April 30, 2001, BioCryst announced that Ortho-McNeil and RWJPRI, gave four months prior notice of termination of the worldwide license agreement with BioCryst to develop and market products to treat and prevent viral influenza. Ortho-McNeil returned all rights to BioCryst's proprietary influenza neuraminidase inhibitors, including peramivir, back to the Company. Ortho-McNeil transferred to BioCryst all improvements, information, data and materials connected to the licensed product including, but not limited to, clinical and chemical data, regulatory filings, specifications and third party agreements. Ortho-McNeil indicated that this business decision was not related to safety or efficacy of peramivir, but that other of its drug development programs were of a higher priority. The final termination of this agreement was effective on September 21, 2001.

We are continuing Phase III development of peramivir while we seek a new corporate partner to facilitate the final development and potential commercialization of this drug candidate. Even if we or any potential licensee continues certain Phase III clinical trials, the trials may not be successful. We do not know when, if ever, our drug candidate will complete all the required Phase III clinical trials, or when, if ever, it will receive FDA or foreign regulatory agency approvals for, or when, if ever, marketing of peramivir will begin. If we or any partners are unable to complete the clinical trials or demonstrate the safety and efficacy of our compounds, the loss of our future revenues that depend on the success of peramivir will harm our business. Even if the results of the Phase III trials are positive, a product is not likely to be commercially available for three or more years, if at all.

***If we or our licensees 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 licensees must obtain regulatory approval before marketing or selling our future drug products. If we or our licensees are unable to receive regulatory approval and do not market or sell our future drug products, we will never receive any revenue from such product sales. In the United States, we or our partners must obtain FDA approval for each drug that we intend to commercialize. The FDA approval process is typically lengthy and expensive, and approval is never certain. Products distributed abroad are also subject to foreign government regulation. The FDA or foreign regulatory agencies have not approved any of our drug candidates. If we or our licensees fail to obtain regulatory approval we will be unable to market and sell our future drug products. We have several drug products in various stages of preclinical and clinical development; however, we are unable to determine when, if ever, any of these products will be commercially available. Because of the risks and uncertainties in biopharmaceutical development, our drug 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 drug 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 drug candidate, the approval may limit the indicated uses for a drug candidate and/or may require post-marketing studies.

The FDA regulates, among other things, the record keeping and storage of data pertaining to potential pharmaceutical products. We currently store most of our preclinical research data at our facility. While we do store duplicate copies of most of our clinical data offsite, we could lose important preclinical 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 royalty revenues if our licensees do not receive approval of our products for marketing.

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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 cutaneous T-cell lymphoma and psoriasis. The FDA inspected us in November 1995 and issued us 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 cutaneous T-cell lymphoma 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. BioCryst is 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.

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

Our drug candidates, including peramivir, our influenza neuraminidase inhibitor, may not gain the market acceptance required for us to be profitable even if they receive approval for sale by the FDA or foreign regulatory agencies. The degree of market acceptance of any drug candidates that we or our partners develop will depend on a number of factors, including:

cost-effectiveness of our drug candidates;

their safety and effectiveness relative to alternative treatments, such as Hoffmann-La Roche's and Glaxo-SmithKline's influenza neuraminidase inhibitors, amantadine, rimantadine, or vaccines for prevention of influenza;

reimbursement policies of government and third-party payers; and

marketing and distribution support for our drug candidates.

Physicians, patients, payers or the medical community in general may not accept or use our drug candidates even after the FDA or foreign regulatory agencies approve the drug candidates. If our drug candidates do not achieve significant market acceptance, we will not have enough revenues to become profitable.

***If competitive products from other companies are better than our product candidates, our future revenues might fail to meet expectations***

The biotechnology and pharmaceutical industries are highly competitive and are subject to rapid and substantial technological change. Other products and therapies that either currently exist on the market or are under development could compete directly with some of the compounds that we are seeking to develop and market. These other products may render some or all of our compounds under development noncompetitive or obsolete.

If our influenza neuraminidase inhibitor drug candidate, peramivir, receives FDA or foreign regulatory approval, it will have to compete with a number of products that are already on the market such as vaccines, the two influenza neuraminidase inhibitors already on the market, the drugs amantadine and rimantadine and with additional products that may beat peramivir to the market. If approved, peramivir will be, at best, the third neuraminidase inhibitor to the market, because the FDA has approved both GlaxoSmithKline's and Hoffman-La Roche's neuraminidase inhibitors in the U.S. and both companies have also obtained approval in several other countries. Both GlaxoSmithKline and Hoffmann-La Roche, the companies responsible for the development and marketing of Relenza® and Tamiflu®, the two neuraminidase inhibitors that reached the market before peramivir, are large multinational pharmaceutical companies that have significant financial, technical and human resources and could therefore establish brand recognition and loyalty with consumers before peramivir is on the market. Products marketed by our competitors may prove to be more effective than our own, and our products, if any, may not offer an economically feasible or preferable alternative to existing therapies. 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 licensors to obtain patent protection for our products, methods, processes and other technologies to preserve our trade secrets, and to operate without infringing the proprietary rights of third parties. If we or our partners are unable to adequately protect or enforce our intellectual property rights for our products, methods, processes and other technologies, the value of the drug candidates that we license to derive revenue would

diminish. Additionally, if our products, methods, processes and other technologies infringe the proprietary rights of other parties, we could incur substantial costs. The U.S. Patent and Trademark Office has issued to us a number of U.S. 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 U.S. Patent and Trademark Office. We have filed a number of corresponding foreign patent applications and intend to file additional foreign and U.S. patent applications, as appropriate. We cannot assure you as to:

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the degree and range of protection any patents will afford against competitors with similar products;

if and when patents will issue; or

whether or not others will obtain patents claiming aspects similar to those covered by our patent applications.

If the U.S. Patent and Trademark Office upholds patents issued to others or if the U.S. Patent and Trademark Office 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 U.S. Patent and Trademark 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 collaborators 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 our technology and any such events would significantly impair the value of such a license.

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

We are highly dependent upon our senior management and scientific team, the 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. In addition, we rely on members of our scientific advisory board and consultants to assist us in formulating our research and development strategy. All of the members of the scientific advisory board and all of our consultants are otherwise employed and each such member or consultant may have commitments to other entities that may limit their availability to us.

***If users of our drug products are not reimbursed for use, future sales of our drug products will decline***

The lack of reimbursement for the use of our product candidates by hospitals, clinics, patients or doctors will harm our business. Medicare, Medicaid, health maintenance organizations and other third-party payers may not authorize or otherwise

budget for the reimbursement of our products. Governmental and third-party payers are increasingly challenging the prices charged for medical products and services. We cannot be sure that third-party payers would view our product candidates as cost-effective, that reimbursement will be available to consumers or that reimbursement will be sufficient to allow our product candidates to be marketed on a competitive basis. Changes in reimbursement policies, or attempts to contain costs in the health care industry, limit or restrict reimbursement for our product candidates, would materially and adversely affect our business, because future product sales would decline and we would receive less royalty revenue.

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***If we face clinical trial liability claims related to the use or misuse of our compounds in clinical trials, our management's time will be diverted and we will incur litigation costs***

We face an inherent business risk of liability claims in the event that the use or misuse of our compounds results in personal injury or death. We have not experienced any clinical trial liability claims to date, but we may experience these claims in the future. After commercial introduction of our products we may experience losses due to product liability claims. We currently maintain clinical trial liability insurance coverage in the amount of \$1.0 million per occurrence and \$2.0 million in the aggregate, with an additional \$5.0 million potentially available under our umbrella policy. The insurance policy may not be sufficient to cover claims that may be made against us. Clinical trial liability insurance may not be available in the future on acceptable terms, if at all. Any claims against us, regardless of their merit, could materially and adversely affect our financial condition, because litigation related to these claims would strain our financial resources in addition to consuming the time and attention of our management.

***If our computer systems fail, our business will suffer***

Our drug development activities depend on the security, integrity and performance of the computer systems supporting them, and the failure of our computer systems could delay our drug development efforts. We currently store most of our preclinical and clinical data at our facility. Duplicate copies of all 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, 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.

***Because stock ownership is concentrated, you and other investors will have minimal influence on stockholder decisions***

Our directors, executive officers and some principal stockholders and their affiliates, including Johnson & Johnson Development Corporation, beneficially own approximately 42% (directors and officers own 28%) of our outstanding common stock and common stock equivalents. As a result, these holders, if acting together, are able to significantly influence matters requiring stockholder approval, including the election of directors. This concentration of ownership may delay, defer or prevent a change in our control.

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

Our board of directors has the authority to issue up to 5,000,000 shares of undesignated preferred stock and to determine the rights, preferences, privileges and restrictions of those shares without further vote or action by our stockholders. The rights of the holders of any preferred stock that may be issued in the future may adversely affect the rights of the holders of common stock. The issuance of preferred stock could make it more difficult for third parties to acquire a majority of our outstanding

voting stock.

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

***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, 2001, the 52-week range of the market price of our stock has been from \$3.00 to \$8.88 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;

status of new or existing licensing or collaborative agreements;

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

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

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;

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

period-to-period fluctuations in our financial results.

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**7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES  
ABOUT MARKET RISK.**

The primary objective of our investment activities is to preserve principal while maximizing the income we receive from our investments without significantly increasing our risk. We invest excess cash principally in U.S. marketable securities from a diversified portfolio of institutions with strong credit ratings and in U.S. government and agency bills and notes, and by policy, limit the amount of credit exposure at any one institution. 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 cash flow needs, thus avoiding the need to redeem an investment prior to its maturity date. Accordingly, we believe we have no material exposure to interest rate risk arising from our investments. Therefore, no quantitative tabular disclosure is provided.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

**BALANCE SHEETS**

|   | <b>December 31,</b>  |                      |
|---|----------------------|----------------------|
|   | <b>2001</b>          | <b>2000</b>          |
|   | <u>          </u>    | <u>          </u>    |
| <b>Assets</b>   |                      |                      |
| Cash and cash equivalents (Notes 1 and 3)   | \$ 18,865,326        | \$ 8,455,802         |
| Securities held-to-maturity (Notes 1 and 3)   | 13,121,862           | 16,179,508           |
| Deferred expense (Notes 1 and 10)   | 0                    | 443,698              |
| Prepaid expenses and other current assets   | 416,555              | 680,632              |
|   | <u>          </u>    | <u>          </u>    |
| Total current assets  | 32,403,743           | 25,759,640           |
| Securities held-to-maturity (Notes 1 and 3)   | 20,953,723           | 40,947,952           |
| Furniture and equipment, net (Notes 1 and 2)  | 5,395,824            | 3,837,482            |
| Patents and licenses, less accumulated amortization<br>of \$6,666 in 2001 and \$3,268 in 2000 (Note 1)                                    | 343,025              | 280,985              |
|   | <u>          </u>    | <u>          </u>    |
| Total assets  | <u>\$ 59,096,315</u> | <u>\$ 70,826,059</u> |
| <br><b>Liabilities and Stockholders' Equity</b>   |                      |                      |
| Accounts payable  | \$ 617,586           | \$ 804,099           |
| Accrued expenses (Note 4)   | 1,132,293            | 329,093              |
| Deferred revenue (Notes 1 and 10)   | 0                    | 2,813,445            |
| Accrued vacation  | 232,725              | 165,445              |
| Current maturities of capital lease obligations (Note 5)  | 0                    | 9,788                |
|   | <u>          </u>    | <u>          </u>    |
| Total current liabilities   | 1,982,604            | 4,121,870            |
| Deferred revenue (Notes 1 and 10)   | 300,000              | 5,223,531            |
| Stockholders' equity (Notes 7 and 8):   |                      |                      |
| Preferred stock, \$.01 par value, shares authorized -<br>5,000,000; none issued and outstanding   |                      |                      |
| Common stock, \$.01 par value; shares authorized -<br>45,000,000; shares issued and outstanding -<br>17,606,970 - 2001; 17,536,821 - 2000 | 176,070              | 175,368              |
| Additional paid-in capital  | 131,668,665          | 131,350,338          |
| Accumulated deficit   | (75,031,024)         | (70,045,048)         |
|   | <u>          </u>    | <u>          </u>    |
| Total stockholders' equity  | 56,813,711           | 61,480,658           |
|   | <u>          </u>    | <u>          </u>    |
| Commitments and contingency (Notes 5 and 9)   |                      |                      |
| Total liabilities and stockholders' equity  | <u>\$ 59,096,315</u> | <u>\$ 70,826,059</u> |

See accompanying notes to financial statements.

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**STATEMENTS OF OPERATIONS**

|   | <u>Years Ended December 31,</u> |                 |                |
|---|---------------------------------|-----------------|----------------|
|   | <u>2001</u>                     | <u>2000</u>     | <u>1999</u>    |
| <b>Revenues:</b>  |                                 |                 |                |
| Collaborative and other research and development (Notes 1, 9, and 10)                   | \$ 7,736,976                    | \$ 3,315,594    | \$ 2,499,679   |
| Litigation settlement   | 0                               | 0               | 1,200,000      |
| Interest and other  | 3,420,658                       | 4,345,761       | 1,629,046      |
|   | <hr/>                           | <hr/>           | <hr/>          |
| Total revenues  | 11,157,634                      | 7,661,355       | 5,328,725      |
| <b>Expenses:</b>  |                                 |                 |                |
| Research and development  | 13,091,057                      | 9,590,352       | 7,682,862      |
| General and administrative  | 2,608,392                       | 3,424,483       | 2,738,494      |
| Royalty expense   | 443,697                         | 132,773         | 200,000        |
| Interest  | 464                             | 3,354           | 5,009          |
|   | <hr/>                           | <hr/>           | <hr/>          |
| Total expenses  | 16,143,610                      | 13,150,962      | 10,626,365     |
|   | <hr/>                           | <hr/>           | <hr/>          |
| Loss before cumulative effect of change in accounting principle                         | (4,985,976)                     | (5,489,607)     | (5,297,640)    |
| Cumulative effect of change in accounting principle (Note 10)                           | 0                               | (6,088,235)     | 0              |
|   | <hr/>                           | <hr/>           | <hr/>          |
| Net loss  | \$ (4,985,976)                  | \$ (11,577,842) | \$ (5,297,640) |
|   | <hr/>                           | <hr/>           | <hr/>          |
| Amounts per common share:   |                                 |                 |                |
| Loss before cumulative effect of change in accounting principle                         | \$(.28)                         | \$(.31)         | \$(.34)        |
| Cumulative effect of change in accounting principle (Note 10)                           | (.00)                           | (.35)           | (.00)          |
|   | <hr/>                           | <hr/>           | <hr/>          |
| Net loss (Note 1)   | \$(.28)                         | \$(.66)         | \$(.34)        |
|   | <hr/>                           | <hr/>           | <hr/>          |
| Pro forma amounts assuming the change in accounting principle is applied retroactively: |                                 |                 |                |
| Net loss  | \$ (4,985,976)                  | \$ (5,489,607)  | \$ (5,685,875) |
| Net loss per common share   | \$(.28)                         | \$(.31)         | \$(.37)        |
| Weighted average shares outstanding (Note 1)  | 17,560,143                      | 17,467,381      | 15,380,100     |

See accompanying notes to financial statements.

## STATEMENTS OF STOCKHOLDERS EQUITY

|   | Common<br>Stock   | Additional<br>Paid-in<br>Capital | Accumulated<br>Deficit | Total Stock-<br>Holders<br>Equity |
|---|-------------------|----------------------------------|------------------------|-----------------------------------|
|   | <u>          </u> | <u>          </u>                | <u>          </u>      | <u>          </u>                 |
| <b>Balance at December 31, 1998</b>               | <b>\$ 149,600</b> | <b>\$ 80,702,381</b>             | <b>\$ (53,169,566)</b> | <b>\$ 27,682,415</b>              |
| Sale of common stock, 2,000,000 shares            | 20,000            | 46,757,627                       |                        | 46,777,627                        |
| Exercise of stock options, 277,814 shares         | 2,778             | 2,003,600                        |                        | 2,006,378                         |
| Employee stock purchase plan sales, 26,056 shares | 261               | 179,709                          |                        | 179,970                           |
| Compensation cost                                 |                   | 54,723                           |                        | 54,723                            |
| Net loss  |                   |                                  | (5,297,640)            | (5,297,640)                       |
|   | <u>172,639</u>    | <u>129,698,040</u>               | <u>(58,467,206)</u>    | <u>71,403,473</u>                 |
| <b>Balance at December 31, 1999</b>               | <b>172,639</b>    | <b>129,698,040</b>               | <b>(58,467,206)</b>    | <b>71,403,473</b>                 |
| Exercise of stock options, 255,170 shares, net    | 2,551             | 1,321,801                        |                        | 1,324,352                         |
| Employee stock purchase plan sales, 17,773 shares | 178               | 225,968                          |                        | 226,146                           |
| Compensation cost                                 |                   | 104,529                          |                        | 104,529                           |
| Net loss  |                   |                                  | (11,577,842)           | (11,577,842)                      |
|   | <u>175,368</u>    | <u>131,350,338</u>               | <u>(70,045,048)</u>    | <u>61,480,658</u>                 |
| <b>Balance at December 31, 2000</b>               | <b>175,368</b>    | <b>131,350,338</b>               | <b>(70,045,048)</b>    | <b>61,480,658</b>                 |
| Exercise of stock options, 46,027 shares, net     | 461               | 101,907                          |                        | 102,368                           |
| Employee stock purchase plan sales, 24,122 shares | 241               | 93,131                           |                        | 93,372                            |
| Compensation cost                                 |                   | 123,289                          |                        | 123,289                           |
| Net loss  |                   |                                  | (4,985,976)            | (4,985,976)                       |
|   | <u>176,070</u>    | <u>131,668,665</u>               | <u>(75,031,024)</u>    | <u>56,813,711</u>                 |
| <b>Balance at December 31, 2001</b>               | <b>\$ 176,070</b> | <b>\$ 131,668,665</b>            | <b>\$ (75,031,024)</b> | <b>\$ 56,813,711</b>              |

See accompanying notes to financial statements.

## STATEMENTS OF CASH FLOWS

|   | Years Ended December 31, |                   |                   |
|---|--------------------------|-------------------|-------------------|
|   | 2001                     | 2000              | 1999              |
|   | <u>          </u>        | <u>          </u> | <u>          </u> |
| <b>Operating activities:</b>  |                          |                   |                   |
| Net loss  | \$ (4,985,976)           | \$ (11,577,842)   | \$ (5,297,640)    |
| Adjustments to reconcile net loss to net cash used in operating activities- |                          |                   |                   |
| Depreciation and amortization   | 1,046,037                | 666,714           | 523,530           |
| Amortization of patents and licenses  | 3,398                    | 2,500             | 1,112             |
| Non-monetary compensation cost  | 123,289                  | 104,529           | 54,723            |
| Deferred expense  | 443,698                  | (443,698)         | 0                 |
| Deferred revenue  | (7,736,976)              | 7,736,976         | 700,000           |
| Changes in operating assets and liabilities-                                |                          |                   |                   |
| Prepaid expenses and other assets   | 264,077                  | (3,898)           | (778,271)         |
| Accounts payable  | (186,513)                | 512,554           | 48,470            |



|  | <u>Years Ended December 31,</u> |                     |                     |
|--|---------------------------------|---------------------|---------------------|
| Accrued expenses   | 803,200                         | (212,429)           | (206,658)           |
| Accrued vacation   | 67,280                          | 36,954              | 36,570              |
| <b>Net cash used in operating activities</b>               | <b>(10,158,486)</b>             | <b>(3,177,640)</b>  | <b>(4,918,164)</b>  |
| <b>Investing activities:</b>                               |                                 |                     |                     |
| Purchases of furniture and equipment                       | (2,604,379)                     | (2,723,296)         | (896,650)           |
| Purchases of patents and licenses                          | (65,438)                        | (101,714)           | (101,160)           |
| Purchase of marketable securities                          | (26,433,622)                    | (10,807,925)        | (60,058,059)        |
| Maturities of marketable securities                        | 49,485,497                      | 15,096,509          | 13,342,760          |
| <b>Net cash provided by/(used in) investing activities</b> | <b>20,382,058</b>               | <b>1,463,574</b>    | <b>(47,713,109)</b> |
| <b>Financing activities:</b>                               |                                 |                     |                     |
| Principal payments of debt and capital lease obligations   | (9,788)                         | (12,077)            | (12,603)            |
| Exercise of stock options                                  | 102,368                         | 1,324,352           | 2,006,378           |
| Employee stock purchase plan stock sales                   | 93,372                          | 226,146             | 179,970             |
| Sale of common stock, net of issuance costs                | 0                               | 0                   | 46,777,627          |
| <b>Net cash provided by financing activities</b>           | <b>185,952</b>                  | <b>1,538,421</b>    | <b>48,951,372</b>   |
| Increase (decrease) in cash and cash equivalents           | 10,409,524                      | (175,645)           | (3,679,901)         |
| Cash and equivalents at beginning of year                  | 8,455,802                       | 8,631,447           | 12,311,348          |
| <b>Cash and cash equivalents at end of year</b>            | <b>\$ 18,865,326</b>            | <b>\$ 8,455,802</b> | <b>\$ 8,631,447</b> |

See accompanying notes to financial statements.

## NOTES TO FINANCIAL STATEMENTS

### Note 1 - Accounting Policies

#### *The Company*

BioCryst Pharmaceuticals, Inc., a Delaware corporation, (the Company) is a biotechnology company focused on the development of pharmaceuticals for the treatment of infectious, inflammatory and cardiovascular diseases and disorders. The Company has six research projects in different stages of development from early discovery to an ongoing Phase III trial of the Company's most advanced drug candidate. While the prospects for a project may increase as the project advances to the next stage of development, a project can be terminated at any stage of development. Until the Company generates revenues from either a research project or an approved product, its ability to continue research projects is dependent upon its ability to raise funds.

#### *Net Loss Per Share*

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The Company computes net income (loss) per share in accordance with Statement of Financial Accounting Standards No. 128, *Earnings per Share*. Net loss per share is based upon the weighted average number of common shares outstanding during the period. Common equivalent shares from unexercised stock options are excluded from the computation, as their effect is anti-dilutive. Common stock equivalents of approximately 57,562, 1,314,399 and 2,422,245 shares were not used to calculate net loss per share in 2001, 2000 and 1999, respectively, because of their anti-dilutive effect. There were no reconciling items in calculating the numerator for net loss per share for any of the periods presented.

### ***Securities Held-to-Maturity***

The Company is required to classify debt and equity securities as held-to-maturity, available-for-sale or trading. The appropriateness of each classification is reassessed at each reporting date. The only dispositions were maturities of securities either held-to-maturity or until called. At December 31, 2001 and 2000, respectively, securities held-to-maturity consisted of \$34,075,585 and \$57,127,460 of U.S. Treasury and Agency securities carried at amortized cost. All of the non-current portions of securities held-to-maturity are U.S. Agency securities that mature in 2003 - 2005. The estimated fair value of these securities at December 31, 2001 and 2000, respectively, was approximately \$34,419,937 and \$56,698,141. The Company has pledged \$600,000 in securities to cover any future draw against the line of credit and a U.S. Treasury security of \$455,000 deposited in escrow for the payment of rent and performance of other obligations specified in the lease dated July 12, 2000. The pledge for the lease shall decrease \$65,000 annually throughout the term of the lease.

### ***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. Leased laboratory equipment is amortized over the lease life of five years. Leasehold improvements are amortized over the remaining lease period.

### ***Patents and Licenses***

Patents and licenses are recorded at cost and amortized on a straight-line basis over their estimated useful lives or 20 years, whichever is lesser.

### ***Income Taxes***

The liability method is used in accounting for income taxes in accordance with Statement of Financial Accounting Standards No. 109, *Accounting for Income Taxes* ( Statement No. 109 ). 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.

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### ***Revenue Recognition***

Prior to January 1, 2000, the Company recognized research and development fees, license fees and milestone payments as revenue when received. Effective January 1, 2000, the Company changed its method of accounting for revenue recognition in accordance with SEC Staff Accounting Bulletin No. 101, *Revenue Recognition in Financial Statements* ( SAB 101 ). Research and development revenue on cost-reimbursement agreements is recognized as expenses are incurred, up to contractual limits. Research and development fees and license fees are recognized as revenue when the earnings process is complete, the Company has no further continuing performance obligations and has completed its performance under the terms of the agreement, in accordance with SAB 101. License fees and milestone payments received under licensing agreements that are related to future performance are deferred and taken into income as earned over the estimated drug development period. The Company has not received any royalties from the sale of licensed compounds.

### ***Statements of Cash Flows***

For purposes of the statements of cash flows, the Company considers cash equivalents to be all cash held in money market accounts or investments in debt instruments with maturities of three months or less at the time of purchase.

**Stock-Based Compensation**

The Company accounts for stock-based compensation under Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees ( APB No. 25 ). Under APB No. 25, the Company's stock option and employee stock purchase plans qualify as noncompensatory plans. Under Financial Accounting Standards Board Interpretation 44 of APB No. 25, outside directors are considered employees for purposes of applying APB No. 25, if they are elected by the shareholders. Consequently, no compensation expense for employees and directors is recognized. Stock issued to non-employees is compensatory and a compensation expense is recognized under Statement of Financial Accounting Standards No. 123, *Accounting for Stock-Based Compensation* ( Statement No. 123 ).

**Use of Estimates**

Management is required to make estimates and assumptions that affect the amounts reported in the financial statements. Actual results could differ from those estimates.

**Reclassifications**

The 2000 and 1999 financial statements have been reclassified to conform to the 2001 financial statements presentation. The changes had no effect on the results of operations previously reported.

**Note 2 - Furniture and Equipment**

Furniture and equipment consisted of the following at December 31:

|  | <u>2001</u>         | <u>2000</u>         |
|--|---------------------|---------------------|
| Furniture and fixtures                         | \$ 320,888          | \$ 301,721          |
| Office equipment                               | 507,320             | 396,195             |
| Software                                       | 478,783             | 253,438             |
| Laboratory equipment                           | 3,183,343           | 2,246,281           |
| Leased equipment                               | 62,712              | 62,712              |
| Construction-in-progress                       | 1,060,397           | 0                   |
| Leasehold improvements                         | 3,392,600           | 3,141,317           |
|  | <u>9,006,043</u>    | <u>6,401,664</u>    |
| Less accumulated depreciation and amortization | <u>(3,610,219)</u>  | <u>(2,564,182)</u>  |
| Furniture and equipment, net                   | <u>\$ 5,395,824</u> | <u>\$ 3,837,482</u> |

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The Company does not have any significant impairment losses under Statement of Financial Accounting Standards No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of*.

**Note 3 - Concentration of Credit and Market Risk**

The Company invests its excess cash principally in U.S. marketable securities from a diversified portfolio of institutions with strong credit ratings and in U.S. government and agency bills and notes, and, by policy, limits the amount of credit exposure at any one institution. These investments are generally not collateralized and primarily mature within less than four years. The Company has not realized any losses from such investments. At December 31, 2001, approximately \$15,211,289 was invested in the Merrill Lynch Premier Institutional Fund, which invests primarily in commercial paper, U.S. government and agency bills and notes, corporate notes, certificates of deposit and time deposits. The Merrill Lynch Premier Institutional Fund is not insured.

**Note 4 - Accrued Expenses**

Accrued expenses were comprised of the following at December 31:

|                                  | <u>2001</u>                 | <u>2000</u>                 |
|----------------------------------|-----------------------------|-----------------------------|
| Accrued clinical trials          | \$ 893,395                  | \$ 160,416                  |
| Stock purchase plan withholdings | 83,725                      | 77,757                      |
| Accrued other                    | 155,173                     | 90,920                      |
|                                  | <u>                    </u> | <u>                    </u> |
| Accrued expenses                 | <u>\$ 1,132,293</u>         | <u>\$ 329,093</u>           |

**Note 5 - Lease and Debt Obligations**

The Company paid \$464, \$3,354 and \$5,009 in interest on debt and lease obligations for the years ended December 31, 2001, 2000 and 1999, respectively. The Company had an unused line of credit of \$500,000 at December 31, 2001.

The Company has the following lease obligations at December 31, 2001:

|                        | <u>Operating<br/>Leases</u> |
|------------------------|-----------------------------|
| 2002                   | \$ 567,123                  |
| 2003                   | 580,803                     |
| 2004                   | 594,897                     |
| 2005                   | 605,139                     |
| 2006                   | 573,031                     |
|                        | <u>                    </u> |
| Total minimum payments | <u>\$ 2,920,993</u>         |

Rent expense for operating leases was \$484,227, \$405,289 and \$348,177 in 2001, 2000 and 1999, respectively. The commitment for operating leases is primarily related to the building lease, which expires in June 2010. The lease, as amended effective July 1, 2001 for additional space, requires monthly rent starting at \$33,145 per month in July 2001 and escalating annually to a minimum of \$47,437 per month in the final year. We have an option to renew the lease for an additional five years at the current market rate at that time.

**Note 6 - Income Taxes**

The Company has not had taxable income since incorporation and, therefore, has not paid any income tax. Deferred tax assets of approximately \$35,017,000 and \$31,667,000 at December 31, 2001 and 2000, respectively, have been recognized principally for the net operating loss and research and development credit carryforwards, and have been reduced by a valuation allowance of \$35,017,000 and \$31,667,000 at December 31, 2001 and 2000, respectively. The valuation allowance will remain at the full amount of the deferred tax asset until it is more likely than not that the related tax benefits will be realized.

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At December 31, 2001, the Company had net operating loss and research and development credit carryforwards ( Carryforward Tax Benefits ) of approximately \$76,200,000 and \$7,500,000, respectively, which will expire in 2005 through 2021. Use of the Carryforward Tax Benefits will be subject to a substantial annual limitation due to the change of ownership provisions of the Tax Reform Act of 1986. The annual limitation is expected to result in the expiration of a portion of Carryforward Tax Benefits before utilization, which has been considered by the Company in its computations under Statement No. 109. Additional sales of the Company's equity securities may result in further annual limitations on the use of the

Carryforward Tax Benefits against taxable income in future years.

**Note 7 - Stockholders Equity**

In November 1991, the Board of Directors adopted the 1991 Stock Option Plan ( Plan ) for key employees and consultants of the Company and reserved 500,000 shares of common stock for the Plan. The Plan was approved by the stockholders on December 19, 1991. The term of the Plan is for ten years and includes both incentive stock options and non-statutory options. The option price shall not be less than the fair market value of common stock on the grant date. The options 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. Options are generally granted to all full-time employees.

The Plan was amended and restated in February 1993 to effect the following changes: (i) divide the plan into two separate incentive programs: the Discretionary Option Grant Program and the Automatic Option Grant Program, (ii) increase the number of shares of the Company s common stock available for issuance under the plan by 500,000 shares and (iii) expand the level of benefits available under the Plan. The Board amended the Plan on December 23, 1993 to increase the number of shares issuable under the Plan by 500,000 shares and subsequently amended and restated the Plan in its entirety on February 8, 1994. On March 16, 1995, the Board authorized another 500,000 shares for the Plan. The Plan was subsequently amended and restated effective March 3, 1997, which amendment and restatement included an increase of 1,000,000 shares. The Plan (as so amended and restated) was further amended March 1, 1999 to increase the share reserve by 400,000 shares. The Board amended and restated the Plan in its entirety on March 6, 2000 (the Effective Date ), which increased the reserved shares by 1,200,000 and extended the term of the Plan for ten years from the date of the amendment. This restatement was approved by the Company s stockholders on May 17, 2000. The automatic option grant program grants options to purchase 10,000 shares to new non-employee Board members and an additional 10,000 shares annually over such period of continued service. The vesting and exercise provisions are subject to acceleration in the event of certain stockholder-approved transactions (a Corporate Transaction ), or upon the occurrence of a Change in Control as defined by the restated Plan.

The following is an analysis of stock options for the three years ended December 31, 2001:

|                           | <u>Options<br/>Available</u> | <u>Options<br/>Outstanding</u> | <u>Weighted<br/>Average<br/>Exercise Price</u> |
|---------------------------|------------------------------|--------------------------------|--|
| Balance December 31, 1998 | 121,555                      | 2,479,514                      | \$ 7.61  |
| Option plan amended       | 400,000                      |                                |  |
| Options granted           | (427,720)                    | 427,720                        | 19.65  |
| Options exercised         |                              | (277,814)                      | 7.22   |
| Options canceled          | 80,616                       | (80,616)                       | 8.24   |
|                           | <hr/>                        | <hr/>                          |  |
| Balance December 31, 1999 | 174,451                      | 2,548,804                      | 9.80   |
| Option plan amended       | 1,200,000                    |                                |  |
| Options granted           | (380,890)                    | 380,890                        | 11.70  |
| Options exercised         |                              | (256,949)                      | 4.98   |
| Options canceled          | 51,753                       | (51,753)                       | 22.24  |
|                           | <hr/>                        | <hr/>                          |  |
| Balance December 31, 2000 | 1,045,314                    | 2,620,992                      | 10.30  |
| Options granted           | (522,600)                    | 522,600                        | 4.55   |
| Options exercised         |                              | (61,327)                       | 2.82   |
| Options canceled          | 60,992                       | (60,992)                       | 11.55  |
|                           | <hr/>                        | <hr/>                          |  |
| Balance December 31, 2001 | 583,706                      | 3,021,273                      | \$ 9.43  |

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There were 1,986,560, 1,718,834 and 1,595,099 options exercisable at December 31, 2001, 2000 and 1999, respectively. The weighted-average exercise price for options exercisable was \$9.69, \$9.03 and \$7.60 at December 31, 2001, 2000 and 1999, respectively.

The following table summarizes at December 31, 2001, by price range, (1) for options outstanding the number of options outstanding, their weighted-average remaining life and their weighted-average exercise price and (2) for options exercisable the number of options exercisable and their weighted-average exercise price:

| Range              | Outstanding      |            |                | Exercisable      |                |
|--------------------|------------------|------------|----------------|------------------|----------------|
|                    | Number           | Life       | Price          | Number           | Price          |
| \$2 to \$5         | 587,950          | 6.6        | \$ 4.02        | 260,950          | \$ 4.51        |
| 5 to 10            | 1,658,032        | 6.2        | 7.14           | 1,129,525        | 6.99           |
| 10 to 15           | 330,807          | 5.2        | 14.15          | 329,348          | 14.16          |
| 15 to 20           | 93,894           | 5.0        | 16.38          | 93,894           | 16.38          |
| 20 to 25           | 327,520          | 8.0        | 22.83          | 163,577          | 22.83          |
| 25 to 30           | 23,070           | 8.3        | 26.69          | 9,266            | 26.66          |
| <b>\$2 to \$30</b> | <b>3,021,273</b> | <b>6.4</b> | <b>\$ 9.43</b> | <b>1,986,560</b> | <b>\$ 9.69</b> |

As of December 31, 2001, there were an aggregate of 3,666,066 shares reserved for future issuance for both the Stock Option Plan and for the Stock Purchase Plan discussed in Note 8.

The Company follows APB No. 25 in accounting for its Stock Option and Stock Purchase Plans and accordingly does not recognize a compensation cost. The Company has adopted the disclosure requirement of Statement No. 123. Since Statement No. 123 is only applied to options granted after 1994, the pro forma disclosure should not necessarily be considered indicative of future pro forma results when the full four-year vesting (the period in which the compensation cost is recognized) is included in the disclosure in 2001. The fair value of each option grant is estimated on the grant date using the Black-Scholes option-pricing method with the following weighted-average assumptions used for grants in 2001, 2000 and 1999, respectively: no dividends, expected volatility of 92.5, 88.9 and 69.2 percent, risk-free interest rate of 4.6, 5.5 and 6.1 percent and expected lives of five years. The weighted-average grant-date fair values of options granted during 2001 under the Stock Option and Employee Stock Purchase Plans were \$3.33 and \$4.54, respectively. Had the Company adopted Statement No. 123 and determined its compensation cost based on the fair value at the grant dates in 2001, 2000 and 1999, the Company's net loss and net loss per share would have been increased to the pro forma amounts shown below:

|                    |             | 2001           | 2000            | 1999           |
|--------------------|-------------|----------------|-----------------|----------------|
| Net loss           | As reported | \$ (4,985,976) | \$ (11,577,842) | \$ (5,297,640) |
|                    | Pro forma   | (7,657,103)    | (14,420,425)    | (7,179,691)    |
| Net loss per share | As reported | (.28)          | (.66)           | (.34)          |
|                    | Pro forma   | (.44)          | (.83)           | (.47)          |

### Note 8 - Employee Benefit Plans

On January 1, 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 \$216,897, \$190,486 and \$151,287 in 2001, 2000 and 1999, respectively.

On May 29, 1995, the stockholders approved an employee stock purchase plan ( Stock Purchase Plan ) effective February 1, 1995. The Company has reserved 200,000 shares of common stock under the Stock Purchase Plan, of which 61,087 shares remain available for purchase at December 31, 2001. 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 the 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 24,122, 17,773 and 26,056 shares of common stock purchased under the Stock Purchase Plan in 2001, 2000 and 1999, respectively, at a weighted average price of \$3.87, \$12.72 and \$6.90, respectively, per share.

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**Note 9 - Collaborative and Other Research and Development Contracts**

The Company granted Novartis Corporation, formerly Ciba-Geigy Corporation ( Novartis ), an option in 1990 to acquire exclusive licenses to a class of inhibitors arising from research performed by the Company by February 1991. The option was exercised and a \$500,000 fee was paid to the Company in 1993. Milestone payments are due upon approval of a new drug application. The Company will also receive royalties based upon a percentage of sales of any resultant products. Up to \$300,000 of the initial fee received is refundable if sales of any resultant products are below specified levels.

On November 7, 1991, the Company entered into a joint research and license agreement with The University of Alabama at Birmingham ( UAB ). UAB performed specific research on Complement Factors for the Company for a period of approximately three years in return for research and license fees. The agreement was replaced by a new agreement on July 18, 1995 granting the Company a worldwide license in exchange for funding certain UAB research and sharing in any royalties or sublicense fees arising from the joint research. On November 17, 1994, the Company entered into another agreement for a joint research and license agreement on influenza neuraminidase granting the Company a worldwide license. Under this agreement, the Company funded certain UAB research and UAB shares in any royalties or sublicense fees arising from the joint research. The Company completed its research funding required by the agreements for both projects in 1998, but is still required to share any future royalties with UAB.

In October 1996, the Company signed a research collaboration agreement with 3-Dimensional Pharmaceuticals. Under this agreement, the companies will share resources and technology to expedite the discovery of new drug candidates for our complement inhibition program. The agreement combines our capabilities in structure-based drug design with the selection power of 3-Dimensional Pharmaceuticals Directed Diversity® technology, a proprietary method of directing combinatorial chemistry and high throughput screening toward specific molecular targets. In June 1999, we updated and renewed our original agreement to concentrate on selected complement enzymes as targets for the design of inhibitors. Under the terms of the 50-50 agreement, we conduct joint research to identify inhibitors of key serine proteases, which represent promising targets for inhibition of complement activation. If a drug candidate emerges as a result of the joint research, the companies will negotiate the product development and commercialization rights and responsibilities.

In 1998, we entered into an exclusive worldwide license agreement with RWJPRI and Ortho-McNeil to develop and market our proprietary influenza neuraminidase inhibitors to treat and prevent viral influenza. We received an initial \$6.0 million payment from Ortho-McNeil and an additional \$6.0 million common stock equity investment from Johnson & Johnson Development Corporation. In June 1999, we received a \$2.0 million milestone payment from Ortho-McNeil in connection with the initiation of Phase II clinical testing in the United States. In February 2000, BioCryst received a \$4.0 million milestone payment from RWJPRI in connection with the initiation of Phase III clinical trials of peramivir (RWJ-270201) in North America and Europe.

On April 30, 2001, we announced that Ortho-McNeil and RWJPRI gave four months prior notice of termination of the worldwide license agreement with BioCryst to develop and market products to treat and prevent viral influenza. Termination of this agreement by RWJPRI and Ortho-McNeil was final on September 21, 2001, and all rights to peramivir and all other patented compounds were returned to the Company. The drug candidate, peramivir, was in Phase III clinical trials, which are still blinded. Ortho-McNeil indicated that this business decision was not related to the safety or efficacy of the drug, but that other of its drug development programs were of a higher priority.

In April 1999, the Company entered into an agreement with Sunol Molecular Corporation. This agreement requires Sunol to conduct research and supply us with protein targets for drug design to expedite the discovery of new drug candidates designed to inhibit Tissue Factor/VIIa for our cardiovascular program.

In October 1999, the Company entered into an agreement with St. Jude Children's Research Hospital in Tennessee, University of Bath in England and University of St. Andrews in Scotland for research and development related to the parainfluenza virus, or PIV. Under the agreement, these organizations will provide us with biological samples and scientific data that will form the basis for our design and development of potential drug candidates for the treatment of PIV. Under the terms of these agreements, these organizations perform specific research for us in return for research payments and license fees. These organizations have granted us certain rights to any discoveries in these areas resulting from research developed by them or jointly developed with us. We have agreed to pay certain royalties on sales of any resulting product and to share in future

payments received from other third-party collaborators, if any.

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In June 2000, the Company licensed a series of potent inhibitors of purine nucleoside phosphorylase, or PNP, from Albert Einstein College of Medicine of Yeshiva University and Industrial Research, Ltd, New Zealand. The lead drug candidate from this collaboration is BCX-1777. We have the rights to develop and ultimately distribute this, or any other, drug candidate that might arise from research on these inhibitors. We have agreed to pay certain milestone payments for future development of these inhibitors, pay certain royalties on sales of any resulting product, and to share in future payments received from other third-party collaborators, if any.

In June 2000, we licensed intellectual property from Emory University related to the Hepatitis C polymerase target associated with Hepatitis C viral infections. Under the terms of the agreement, the research investigators from Emory provide us with materials and technical insight into the target. We have agreed to pay Emory royalties on sales of any resulting product and to share in future payments received from other third party collaborators, if any.

#### **Note 10 - Change in Accounting Principle**

As discussed in Note 1, effective January 1, 2000, the Company changed its method of accounting for revenue recognition in accordance with SAB 101. The cumulative effect of this change in accounting principle on prior years resulted in a charge to income of \$6,088,235, which is included in the net loss for the year ended December 31, 2000. The effect of the change on the year ended December 31, 2000 was to increase the loss before the cumulative effect of the accounting change by \$1,205,000 (\$.07 per share). The pro forma amounts presented in the income statement were calculated assuming the change was made retroactively to prior periods. For each quarter in 2000 and the first quarter in 2001, the Company recognized net revenue of \$405,882 that was included in the cumulative effect adjustment as of January 1, 2000. As a result of the termination of the agreement with Ortho-McNeil and RWJPRI, the Company changed its estimate for recognizing the deferred income and expense from this agreement so that the remaining amounts were recognized in the second and third quarters of 2001. The amounts of net revenue recycled into income from the cumulative effect adjustment in 2000 were \$2,097,000 and \$1,961,825 in the second and third quarters of 2001, respectively. As of December 31, 2001, the balance of both the deferred revenue and deferred expense related to the Ortho-McNeil and RWJPRI agreement was \$0.

#### **Note 11 - Recent Accounting Pronouncements**

In July 2001, the FASB issued Statement of Financial Accounting Standards No. 141, *Business Combinations* ( SFAS 141 ), which is effective for all business combinations completed after June 30, 2001. SFAS 141 eliminates the pooling-of-interests method of accounting for business combinations except for qualifying business combinations initiated prior to July 1, 2001. In addition, SFAS 141 further clarifies the criteria to recognize intangible assets separately from goodwill. The Company does not expect there to be a material impact on its financial position, results of operations or cash flows as a result of adopting this accounting standard.

In July 2001, the FASB issued Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets* ( SFAS 142 ), which establishes new rules on the accounting for goodwill and other intangible assets. Under SFAS 142, goodwill and intangible assets with indefinite lives will no longer be amortized; however, they will be subject to annual impairment tests as prescribed by the statement. Intangible assets with definite lives will continue to be amortized over their estimated useful lives. The amortization provisions of SFAS 142 apply immediately to goodwill and intangible assets acquired after June 30, 2001. With respect to goodwill and intangible assets acquired prior to July 1, 2001, the Company is required to adopt SFAS 142 beginning January 1, 2002. The Company does not expect there to be a material impact on its financial position, results of operations or cash flows as a result of adopting this accounting standard.

In October 2001, the FASB issued Statement of Financial Accounting Standards No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* ( SFAS 144 ). The Company is required to adopt SFAS 144 beginning January 1, 2002. SFAS 144 changes the criteria that would have to be met to classify an asset as held-for-sale, revises the rules regarding reporting the effects of a disposal of a segment of a business and requires expected future operating losses from discontinued operations to be displayed in discontinued operations in the period(s) in which the losses were incurred. The Company does not expect there to be a material impact on its financial position, results of operations or cash flows, as a result of adopting this accounting standard.



**Note 12 - Quarterly Financial Information (Unaudited)(In thousands, except per share)**

|  | <u>First</u>                          |                        | <u>Second</u>                         |                        | <u>Third</u>                          |                        | <u>Fourth</u>     |
|--|---------------------------------------|------------------------|---------------------------------------|------------------------|---------------------------------------|------------------------|-------------------|
|  | <u>As<br/>Previously<br/>Reported</u> | <u>As<br/>Restated</u> | <u>As<br/>Previously<br/>Reported</u> | <u>As<br/>Restated</u> | <u>As<br/>Previously<br/>Reported</u> | <u>As<br/>Restated</u> |                   |
| <b>2001 Quarters</b>   |                                       |                        |                                       |                        |                                       |                        |                   |
| Revenues   | \$ 1,887                              |                        | \$ 4,536                              |                        | \$ 4,131                              |                        | \$ 603            |
| Net income (loss)  | (1,383)                               |                        | 958                                   |                        | 417                                   |                        | (4,978)           |
| Net income (loss) per share  | (.08)                                 |                        | .05                                   |                        | .02                                   |                        | (.28)             |
| <b>2000 Quarters</b>   |                                       |                        |                                       |                        |                                       |                        |                   |
| Revenues   | \$ 5,223                              | \$ 1,641               | \$ 1,585                              | \$ 2,288               | \$ 1,105                              | \$ 1,807               | \$ 1,925          |
| Income (loss) before<br>cumulative effect of change<br>in accounting principle | 1,858                                 | (1,336)                | (1,995)                               | (1,332)                | (1,643)                               | (980)                  | (1,842)           |
| Cumulative effect of change<br>in accounting principle<br>(Note 10)            | 0                                     | (6,088)                | 0                                     | 0                      | 0                                     | 0                      | 0                 |
| Net income (loss)  | <u>\$ 1,858</u>                       | <u>\$ (7,424)</u>      | <u>\$ (1,995)</u>                     | <u>\$ (1,332)</u>      | <u>\$ (1,643)</u>                     | <u>\$ (980)</u>        | <u>\$ (1,842)</u> |
| Amounts per common share:  |                                       |                        |                                       |                        |                                       |                        |                   |
| Income (loss) before<br>cumulative effect of change<br>in accounting principle | \$ .11                                | \$ (.08)               | \$ (.11)                              | \$ (.08)               | \$ (.09)                              | \$ (.06)               | \$ (.11)          |
| Cumulative effect of change<br>in accounting principle<br>(Note 10)            | .00                                   | (.35)                  | .00                                   | .00                    | .00                                   | .00                    | .00               |
| Net income (loss)  | <u>\$ .11</u>                         | <u>\$ (.43)</u>        | <u>\$ (.11)</u>                       | <u>\$ (.08)</u>        | <u>\$ (.09)</u>                       | <u>\$ (.06)</u>        | <u>\$ (.11)</u>   |

Net (loss) per share for the years 2001 and 2000 differed from the total of the individual quarters due to rounding.

**REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS**

The Board of Directors  
BioCryst Pharmaceuticals, Inc.

We have audited the accompanying balance sheets of BioCryst Pharmaceuticals, Inc. as of December 31, 2001 and 2000, and the related statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2001. 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.

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We conducted our audits in accordance with auditing standards generally accepted in the 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, 2001 and 2000 and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States.

As discussed in Notes 1 and 10 to the financial statements, in 2000 the Company changed its method of revenue recognition.

/s/ ERNST & YOUNG, LLP

Birmingham, Alabama  
January 25, 2002

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

None.

### PART III

### ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The directors and executive officers of the Company are as follows:

| <u>Name</u>                     | <u>Age</u> | <u>Position(s) with the Company</u>                               |
|---------------------------------|------------|---|
| Charles E. Bugg, Ph.D           | 60         | Chairman, Chief Executive Officer and Director                    |
| J. Claude Bennett, M.D          | 68         | President, Chief Operating Officer, Medical Director and Director |
| W. Randall Pittman (4)          | 48         | Chief Financial Officer, Secretary and Treasurer                  |
| John R. Uhrin                   | 49         | Vice President, Corporate Development                             |
| William W. Featheringill (1)(2) | 59         | Director  |
| Edwin A. Gee, Ph.D. (1)(2)      | 82         | Director  |
| Zola P. Horovitz, Ph.D          | 67         | Director  |
| John A. Montgomery, Ph.D. (3)   | 77         | Director  |
| Joseph H. Sherrill, Jr          | 61         | Director  |
| William M. Spencer, III (1)(2)  | 81         | Director  |
| Randolph C. Steer, M.D., Ph.D   | 52         | Director  |

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(1) Member of the Compensation Committee ( Compensation Committee ).

(2) Member of the Audit Committee ( Audit Committee ).

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(3) John A. Montgomery held the positions of Senior Vice President, Secretary and Chief Scientific Officer until his retirement effective January 31, 2002. He will continue to serve as a Director.

(4) Effective February 4, 2002, W. Randall Pittman was appointed Secretary.

*Charles E. Bugg, Ph.D.*, was named Chairman of the Board, Chief Executive Officer and Director in November 1993 and President in January 1995. Dr. Bugg relinquished the position of President in December 1996 when Dr. Bennett joined the Company in that position. Prior to joining the Company, Dr. Bugg had served as the Director of the Center for Macromolecular Crystallography, Associate Director of the Comprehensive Cancer Center and Professor of Biochemistry at The University of Alabama at Birmingham ( UAB ) since 1975. He was a Founder of the Company and served as the Company's first Chief Executive Officer from 1987-1988 while on a sabbatical from UAB. Dr. Bugg also served as Chairman of the Company's Scientific Advisory Board from January 1986 to November 1993. He continues to hold the position of Professor Emeritus in Biochemistry and Molecular Genetics at UAB, a position he has held since January 1994.

*J. Claude Bennett, M.D.*, was named President and Chief Operating Officer in December 1996 and elected a Director in January 1997. Since 2001, Dr. Bennett has also served as the Medical Director. Prior to joining the Company, Dr. Bennett was President of The University of Alabama at Birmingham ( UAB ) from October 1993 to December 1996 and Professor and Chairman of the Department of Medicine of UAB from January 1982 to October 1993. Dr. Bennett served on the Company's Scientific Advisory Board from 1989-96. He is a former co-editor of the *Cecil Textbook of Medicine* and former President of the Association of American Physicians. He is a member of the Scientific Advisory Committee of the Massachusetts General Hospital and continues to hold the position of Distinguished University Professor Emeritus at UAB, a position he has held since January 1997.

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*W. Randall Pittman* joined BioCryst on December 15, 1999 as consultant to the Chief Executive Officer and became Chief Financial Officer, Assistant Secretary and Treasurer on January 10, 2000. Effective February 4, 2002, Mr. Pittman was appointed Secretary. Prior to joining BioCryst, from September 1998 to August 1999, Mr. Pittman was Chief Financial Officer of Scandipharm, a pharmaceutical company. From October 1995 to September 1998, Mr. Pittman was Senior Vice President Finance of Caremark Inc. (formerly MedPartners, Inc.), a health care services company. He was previously Executive Vice President of AmSouth Bancorporation, a regional bank holding company. Mr. Pittman is a Certified Public Accountant.

*John R. Uhrin* joined BioCryst in March 1998 as Vice President, Corporate Development with 21 years of sales and marketing experience in the pharmaceutical, biotechnology, medical and managed care industries. He joined BioCryst following 11 years at Genentech, Inc. From 1987 to 1998, he held various management positions at Genentech, most recently as Director of Special Projects/Managed Care. Prior to working for Genentech, he held various sales and management positions with Eli Lilly from 1977 to 1987.

*William W. Featheringill* was elected a Director in May 1995. Mr. Featheringill is Chairman of the Board, since June 1995, of Electronic Healthcare Systems, a software company, and President, Chief Executive Officer and director, since 1973, of Private Capital Corporation, a venture capital company. Mr. Featheringill was Chairman and Chief Executive Officer of MACESS Corporation, which designs and installs paperless data management systems for the managed care industry, from 1988 to November 1995. MACESS Corporation merged with Sungard Data Systems in late 1995. From 1985 to December 1994, Mr. Featheringill was the developer, Chairman and President of Complete Health Services, Inc., a health maintenance organization which grew, under his direction, to become one of the largest HMOs in the southeastern United States. Complete Health Services, Inc. was acquired by United HealthCare Corporation in June 1994.

*Edwin A. Gee, Ph.D.*, was elected a Director in August 1993. Dr. Gee, who retired in 1985 as Chairman of the Board and Chief Executive Officer of International Paper Company, has been active as an executive in biotechnology, pharmaceutical and specialty chemical companies since 1970. He is Chairman Emeritus and a director of OSI Pharmaceuticals, Inc., one of the leading biotechnology companies for the diagnosis and treatment of cancer.

*Zola P. Horovitz, Ph.D.*, was elected a Director in August 1994. Dr. Horovitz was Vice President of Business Development and Planning at Bristol-Myers Squibb from 1991 until his retirement in April 1994 and previously was Vice President of Licensing at the same company from 1990 to 1991. Prior to that he spent over 30 years with The Squibb Institute for Medical Research, most recently as Vice President Research, Planning, & Scientific Liaison. He has been an independent consultant in

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pharmaceutical sciences and business development since his retirement from Bristol-Myers Squibb in April 1994. He serves on the Boards of Directors of 3-Dimensional Pharmaceuticals, Inc., Avigen, Inc., Diacrin, Inc., Geneara Pharmaceuticals, Inc., Palatin Technologies, Inc., and Synaptic Pharmaceutical Corp.

*John A. Montgomery, Ph.D.*, was a Founder of BioCryst and has been a Director since November 1989. He was the Secretary and Chief Scientific Officer since joining the Company in February 1990. He was Executive Vice President from February 1990 until May 1997, at which time he was named Senior Vice President. Dr. Montgomery retired as an officer of the Company effective January 31, 2002, but remains on the Board of Directors. Prior to joining the Company, Dr. Montgomery served as Senior Vice President of Southern Research Institute ( SRI ) of Birmingham from January 1981 to February 1990. He continues to hold the position of Distinguished Scientist at SRI, a position he has held since February 1990.

*Joseph H. Sherrill, Jr.*, was elected a Director in May 1995. Mr. Sherrill served as President of R. J. Reynolds ("RJR") Asia Pacific, based in Hong Kong, where he oversaw RJR operations across Asia, including licensing, joint ventures and a full line of operating companies from August 1989 to his retirement in October 1994. Prior management positions with RJR include Senior Vice President of Marketing for R.J. Reynolds International, President and Chief Executive Officer of R.J. Reynolds Tabacos de Brazil, and President and General Manager of R.J. Reynolds Puerto Rico.

*William M. Spencer, III*, has been a Director of the Company since its inception. Mr. Spencer, who is retired, is also a private investor in Birmingham, Alabama. Mr. Spencer is a Founder of the Company, and served as Chairman of the Board of the Company from its founding in 1986 until April 1992. He co-founded and operated Motion Industries from 1946 through its merger into Genuine Parts Company in 1976. He has founded several businesses and has served on the Board of Directors of numerous private corporations.

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*Randolph C. Steer, M.D., Ph.D.*, was elected a Director in February 1993. Dr. Steer has been an independent pharmaceutical and biotechnology consultant since 1989, having a broad background in business development, medical marketing and regulatory affairs. He was formerly Chairman, President and CEO of Advanced Therapeutics Communications International, a leading drug regulatory group, and served as associate director of medical affairs at Marion Laboratories, and medical director at Ciba Consumer Pharmaceuticals. Dr. Steer serves on the Board of Directors of Techne Corporation and several privately held companies.

In accordance with the terms of the Company's Certificate of Incorporation, the Board of Directors has been divided into three classes with members of each class holding office for staggered three-year terms. Mr. Featheringill's, Mr. Spencer's and Mr. Sherrill's terms expire at the 2002 annual meeting, Dr. Bennett's, Dr. Horovitz's, and Dr. Steer's terms expire at the 2003 annual meeting and Dr. Bugg's, Dr. Montgomery's and Dr. Gee's terms expire at the 2004 annual meeting (in all cases subject to the election and qualification of their successors or to their earlier death, resignation or removal). At each annual stockholder meeting, the successors to the Directors whose terms expire are elected to serve from the time of their election and qualification until the third annual meeting of stockholders following their election and until a successor has been duly elected and qualified. The provisions of the Company's Certificate of Incorporation governing the staggered Director election procedure can be amended only by a shareholder's vote of at least 75% of the eligible voting securities. There are no family relationships among any of the directors and executive officers of the Company. The Board has by resolution established the number of directors of the Company at nine (9) commencing with the 1999 Annual Meeting of Stockholders.

The Company has an Audit Committee, consisting of Messrs. Featheringill, Gee and Spencer, which is responsible for the review of internal accounting controls, financial reporting and related matters. The Audit Committee also recommends to the Board the independent accountants selected to be the Company's auditors and reviews the audit plan, financial statements and audit results. The Securities and Exchange Commission has adopted new audit committee disclosure rules and approved amendments for Nasdaq listing standards relating to audit committees on December 15, 1999 and the Board has adopted an Audit Committee Charter that meets all these rules. The Audit Committee members are independent directors as defined by the new listing standards.

The Company also has a Compensation Committee consisting of Mr. Featheringill, Dr. Gee and Mr. Spencer. The Compensation Committee is responsible for the annual review of officer compensation and other incentive programs and is authorized to award options under the Company's Stock Option Plan.

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The Company has a Nominating Committee comprised of all outside directors with terms not expiring in the current year for which the Nominating Committee will be nominating persons for election or re-election as directors.

### ITEM 11. EXECUTIVE COMPENSATION

Incorporated by reference from our definitive Proxy Statement to be filed in connection with the solicitation of proxies for our 2002 Annual Meeting of Stockholders.

### ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Incorporated by reference from our definitive Proxy Statement to be filed in connection with the solicitation of proxies for our 2002 Annual Meeting of Stockholders.

### ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Incorporated by reference from our definitive Proxy Statement to be filed in connection with the solicitation of proxies for our 2002 Annual Meeting of Stockholders.

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## PART IV

### ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

#### (a) Financial Statements

|   | <b>Page in<br/>Form 10-K</b> |
|---|------------------------------|
| The following financial statements appear in Item 8 of this Form 10-K:                  |                              |
| Balance Sheets at December 31, 2001 and 2000  | 30                           |
| Statements of Operations for the years ended December 31, 2001, 2000 and 1999           | 31                           |
| Statements of Stockholders' Equity for the years ended December 31, 2001, 2000 and 1999 | 32                           |
| Statements of Cash Flows for the years ended December 31, 2001, 2000 and 1999           | 33                           |
| Notes to Financial Statements   | 34 to 41                     |
| Report of Independent Auditors  | 42                           |

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) Reports on Form 8-K

None

#### (c) Exhibits

| <b>Number</b> | <b>Description</b>   |
|---------------|--|
| 3.1           | Composite Certificate of Incorporation of Registrant. Incorporated by reference to Exhibit 3.1 to the Company's Form 10-Q for the second quarter ending June 30, 1995 dated August 11, 1995. |
| 3.2           | Bylaws of Registrant. Incorporated by reference to Exhibit 3.1 to the Company's Form 10-Q for the second quarter ending June 30, 1995 dated August 11, 1995.                                 |

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| Number | Description   |
|--------|---|
| 4.1    | See Exhibits 3.1 and 3.2 for provisions of the Composite Certificate of Incorporation and Bylaws of the Registrant defining rights of holders of Common Stock of the Registrant.  |
| 10.1   | 1991 Stock Option Plan, as amended and restated as of March 6, 2000. Incorporated by reference to Exhibit 99.1 to the Company's Form S-8 Registration Statement dated June 16, 2000 (Registration No. 333-39484).   |
| 10.2   | Employment Agreement dated December 27, 1999 between the Registrant and Charles E. Bugg, Ph.D. Incorporated by reference to Exhibit 10.10 to the Company's Form 10-K for the year ending December 31, 1999 dated March 24, 2000.  |
| 10.3#  | License Agreement dated April 15, 1993 between Ciba-Geigy Corporation (now merged into Novartis) and the Registrant. Incorporated by reference to Exhibit 10.40 to the Company's Form S-1 Registration Statement (Registration No. 33-73868).   |
| 10.4   | Employee Stock Purchase Plan. Incorporated by reference to Exhibit 99.4 to the Company's Form S-8 Registration Statement (Registration No. 33-95062).   |
| 10.5#  | License Agreement dated as of September 14, 1998 between Registrant and The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil Pharmaceutical, Inc. Incorporated by reference to Exhibit 10.23 to the Company's Form 10-Q for the third quarter ending September 30, 1998 dated November 10, 1998. |
| 10.6#  | Stock Purchase Agreement dated as of September 14, 1998 between Registrant and Johnson & Johnson Development Corporation. Incorporated by reference to Exhibit 10.24 to the Company's Form 10-Q for the third quarter ending September 30, 1998 dated November 10, 1998.  |

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|       |   |
|-------|---|
| 10.7# | Stockholder's Agreement dated as of September 14, 1998 between Registrant and Johnson & Johnson Development Corporation. Incorporated by reference to Exhibit 10.25 to the Company's Form 10-Q for the third quarter ending September 30, 1998 dated November 10, 1998.   |
| 10.8  | 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 dated August 8, 2000.                                     |
| 10.9# | Termination Agreement dated as of September 21, 2001 between Registrant and The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil Pharmaceutical, Inc. Incorporated by reference to Exhibit 10.9 to the Company's Form 10-Q/A for the third quarter ending September 30, 2001 dated January 15, 2002. |
| 10.10 | Change of Control Agreement dated May 25, 2001 between the Registrant and W. Randall Pittman.   |
| 23    | Consent of Ernst & Young LLP, Independent Auditors.   |

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# Confidential treatment granted.

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**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 in the City of Birmingham, State of Alabama, on this 22th day of March, 2002.

BIOCRYST PHARMACEUTICALS, INC.

By: /s/ Charles E. Bugg

Charles E. Bugg, Ph.D.  
Chairman and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934 this report has been signed by the following persons in the capacities indicated on March 22, 2002:

| Signature  | Title(s)  |
|--|---|
| /s/ Charles E. Bugg<br><br>(Charles E. Bugg, Ph.D.)            | Chairman, Chief Executive Officer and Director  |
| /s/ J. Claude Bennett<br><br>(J. Claude Bennett, M.D.)         | President, Chief Operating Officer, Medical Director and Director                             |
| /s/ W. Randall Pittman<br><br>(W. Randall Pittman)             | Chief Financial Officer (Principal Financial and Accounting Officer), Secretary and Treasurer |
| /s/ William W. Featheringill<br><br>(William W. Featheringill) | Director  |
| /s/ Edwin A. Gee<br><br>(Edwin A. Gee, Ph.D.)                  | Director  |
| /s/ Zola P. Horovitz<br><br>(Zola P. Horovitz, Ph.D.)          | Director  |
| /s/ John A. Montgomery<br><br>(John A. Montgomery, Ph.D.)      | Director  |
| /s/ William M. Spencer<br><br>(William M. Spencer, III)        | Director  |
| /s/ Joseph H. Sherrill, Jr.<br><br>(Joseph H. Sherrill, Jr.)   | Director  |
| /s/ Randolph C. Steer<br><br>(Randolph C. Steer, M.D., Ph.D.)  | Director  |

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**INDEX TO EXHIBITS**

| <b>Number</b> | <b>Description</b>  | <b>Sequentially<br/>Numbered<br/>Page</b> |
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