

**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, 1999

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*

**BIOCRIST PHARMACEUTICALS, INC.**

(Exact name of registrant as specified in its charter)

DELAWARE

(State of other jurisdiction of  
no.)  
incorporation or organization)

62-1413174

(I.R.S. employer identification

2190 Parkway Lake Drive; Birmingham, Alabama 35244  
(Address and zip code 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 .

While 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 20, 2000 (based upon the closing price shown on the Nasdaq National Market on March 20, 2000) held by non-affiliates was approximately \$331,962,137. For this computation, the Registrant has excluded the 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 20, 2000 was 17,429,994 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 2000 Annual Meeting of Stockholders are incorporated by reference into Items 11, 12 and 13 under Part III hereof.

## PART I

### ITEM 1. BUSINESS

#### Overview

BioCryst Pharmaceuticals, Inc. is a biotechnology company focused on the development of pharmaceuticals for the treatment of infectious, inflammatory and cardiovascular diseases and disorders. Our most advanced drug candidate, RWJ-270201 (formerly referred to as BCX-1812), is an influenza neuraminidase inhibitor designed to treat and prevent viral influenza. We licensed this drug candidate to The R.W. Johnson Pharmaceutical Research Institute, or PRI, and Ortho-McNeil Pharmaceutical, Inc., both Johnson & Johnson companies. Since we began our collaboration with PRI and Ortho-McNeil, RWJ-270201 has moved through a series of Phase I and Phase II clinical trials and is now in Phase III clinical trials. Phase III trials are underway in North America and Europe.

#### 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 the development of potent, selective inhibitors of enzymes associated with several 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, 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:

o 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. Generally, small-molecule pharmaceuticals have more desirable characteristics. 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.

o 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 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 rapid and 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.

o 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.

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 parties specializing in aspects of our business in which we are not as strong, 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:

o **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. Upon licensing a drug target from these institutions, the scientists from these institutions 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, 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, complement our technology platform, 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 most of our early drug development programs.

o **Licensing Drug Development Candidates to Other Parties.** We plan to advance drug candidates through 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 of late-stage product development, regulatory approval, manufacturing and marketing. We believe that focusing on discovery and early-stage drug development while benefiting from pharmaceutical 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.

## Products in Development

The following table summarizes BioCryst's development projects as of February 29, 2000:

PROGRAM AND INDICATION	DELIVERY FORM	DEVELOPMENT STAGE	WORLDWIDE RIGHTS
Neuraminidase Inhibitor (RWJ-270201) Influenza	Oral	Phase III - Underway	PRI/Ortho-McNeil (1)
PNP Inhibitors Autoimmune diseases	Oral	Preclinical - Evaluating new candidates	BioCryst
Complement Inhibitors Cardiopulmonary Bypass Surgery	Intravenous	Preclinical - Ongoing	BioCryst
Parainfluenza Hemagglutinin Neuraminidase			
Croup, bronchitis and viral pneumonia	Oral	Discovery	BioCryst
Tissue Factor/VIIa Cardiovascular	Oral	Discovery	BioCryst

(1) We licensed our neuraminidase inhibitor, RWJ-270201, to PRI and Ortho-McNeil, both Johnson & Johnson companies.

### Neuraminidase Inhibitor (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 bed-ridden for a few days. In truth, however, flu is a virulent, acute respiratory disease that is sometimes deadly. In North America, Western Europe and Japan, an estimated 70 million to 150 million individuals suffer from influenza annually. The flu is particularly dangerous to the elderly, young children and debilitated patients, accounting for approximately 20,000 deaths in the United States each year. The flu and associated complications are the sixth leading cause of death in the United States. 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.

Flu epidemics are regional outbreaks that cause an average of 40,000 flu-related deaths. Flu pandemics, however, are much more severe. Pandemics are worldwide outbreaks of a particular strain of the virus that occur relatively infrequently but can be disastrous. The Spanish flu pandemic of 1918-19 killed more than 20 million people worldwide. In the United States alone, the Asian flu of 1957-58 resulted in 70,000 deaths, and the Hong Kong flu of 1968-69 caused 34,000 deaths. The worldwide deaths caused by the Asian and Hong Kong pandemics topped 1.5 million, with an estimated impact to the world economy of \$32 billion. Due to increases in the world population and international air travel, mutation of the flu virus could spread rapidly, resulting in widespread morbidity and mortality.

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 may 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 mutation ability, 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.

Research suggests that inhibiting the neuraminidase enzyme would keep 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 would not be enough to cause disease but would be 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 Glaxo Wellcome have neuraminidase inhibitors. Hoffmann-La Roche's neuraminidase inhibitor is a twice-a-day, orally active neuraminidase inhibitor, while Glaxo Wellcome's neuraminidase inhibitor is administered by dry powder inhaler twice a day. Both drugs have approval for marketing in the United States and other countries for treatment 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.

Four of the patented compounds from our development efforts emerged as viable product development candidates. We called them BCX-1812, 1827, 1898 and 1923. Preclinical studies demonstrated that our drug candidates have the following benefits:

- o excellent safety profile;
- o inhibition of both influenza A and B;
- o effective when taken orally;
- o probable once-a-day dosage; and

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

Clinical Development. In September 1998, we entered an exclusive worldwide license agreement with PRI and Ortho-McNeil to develop and market our proprietary influenza neuraminidase inhibitors to treat and prevent viral influenza. Since we began our collaboration with PRI and Ortho-McNeil, RWJ-270201 has moved through a series of Phase I and Phase II clinical trials and is now in Phase III clinical trials. In August 1999, we announced the preliminary results of a Phase II placebo-controlled, randomized study conducted by PRI for the treatment of healthy volunteers infected with a strain of influenza A. PRI advised us that the data from this Phase II study indicated a statistically significant reduction of flu virus in the body and that the drug was well-tolerated at all dosage levels. Phase III clinical trials are underway in North America and Europe, but there can be no guarantee that these trials will be completed and or successful.

## **PNP Inhibitor**

### **Autoimmune Diseases**

Overview. The human immune system employs specialized cells, including T-cells, to control infection by recognizing and attacking disease-causing viruses, bacteria and parasites. T-cells are an essential part of the body's immune system that serve a dual purpose - orchestrating and participating in the body's immune response. For the most part, this system works flawlessly to protect the body. However, there are diseases in which T-cells multiply uncontrollably (T-cell proliferative diseases) or attack normal cells (autoimmune diseases). Proliferating T-cells have been implicated in a number of T-cell cancers, including cutaneous T-cell lymphoma. Cutaneous T-cell lymphoma is a skin cancer in which T-cells, which normally help fight disease, duplicate rapidly and cause skin cancer.

PNP Inhibition. Purine nucleoside phosphorylase, or PNP, is an enzyme that is believed to play an important role in T-cell proliferation, because PNP is necessary to maintain normal DNA synthesis in T-cells. We believe that inhibiting PNP is a new mechanism for suppressing T-cell replication without significantly affecting other cells, and we believe this may prove to have an impact on the treatment of several diseases.

### **Our PNP Inhibitor**

Background. We designed our lead PNP inhibitor drug candidate, BCX-34, to suppress T-cell replication without significantly affecting other cells. BCX-34 has been in clinical trials since 1992. Our initial approach was to develop a cream formulation of BCX-34 applied to the skin, which, if effective, could have led to a rapid, cost-effective regulatory approval. We conducted two Phase III clinical trials in 1996 and 1997 to determine the effects of topical BCX-34 on psoriasis, an autoimmune disease that affects the skin, and cutaneous T-cell lymphoma. These trials, however, did not show statistically significant results between the treated and placebo groups. Therefore, we discontinued the topical program.

Current Development Strategy. We believe that, in order for BCX-34 to be effective, BCX-34 must be administered in a form and an amount that obtains adequate levels of the drug in the body. In the clinical trials we have completed with an oral formulation of BCX-34, the dose levels were inadequate to obtain clinically relevant results. These clinical trials, however, were effective in establishing the safety of BCX-34 at various dose levels and the maximum oral dose absorbable by the body.

In early 2000, we completed a clinical trial to evaluate BCX-34 for the treatment of cutaneous T-cell lymphoma at the maximum oral dose. We had expected to start a second trial for treatment of various other T-cell cancers with intravenous therapy in 2000. However, after completing our high dose oral BCX-34 study, we were unable to show any consistent improvement in disease. Furthermore, upon review of the intravenous PK studies, it became clear that in order to produce a significant rise in plasma deoxyguanosine (which we think is necessary for therapeutic effect), any oral dosing would be insufficient - in fact, any IV dosing would fall short as well. Consequently, for the time being we have discontinued further studies with BCX-34 and its series of compounds. We

are, however, exploring another series of PNP inhibitors, which are much more potent against isolated PNP than is BCX-34.

## **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. Once the immune system recognizes a "foreign invader," complement is activated to destroy or remove it. The complement cascade is the term for a system of functionally linked enzymes that assists in the removal of bacteria or destruction of cells that the body does not recognize as its own.

If these enzymes do not operate properly, they can cause adverse biological effects including tissue damage. This occurs in an unregulated way in certain medical situations such as cardiopulmonary bypass surgery.

### **Our Complement Inhibitors**

**Background.** Working closely with scientists of The University of Alabama at Birmingham, we characterized the three-dimensional structure of one of the components of the complement cascade. In 1997, using X-ray crystallographic and molecular modeling techniques, we designed and synthesized a class of small molecule compounds that are highly potent inhibitors of complement and certain other blood enzymes. These compounds may have applications in the treatment of several disorders by limiting the rapid and aggressive damage caused by the activation of complement proteins. In addition, preclinical studies to examine the safety and efficacy of several of these compounds are currently in progress.

**Clinical Development.** We completed two Phase I studies of one of the drug candidates in our complement inhibitor program. These studies showed that the effective dose for blocking complement activation was too close to toxicologic limits to be used during cardiopulmonary bypass surgery. Hence, other compounds in this series are now being evaluated for clinical development.

### **Tissue Factor/VIIa**

A series of complicated reactions that are initiated by a group of enzymes in the body called the Tissue Factor/VIIa complex forms a blood clot. Animal tests show that blood clot formation can be minimized by inhibiting the Tissue Factor/VIIa complex. Tissue Factor/VIIa inhibitors may potentially be useful in various cardiovascular diseases and disorders. We are attempting to identify potential inhibitors of Tissue Factor/VIIa. We have an agreement with Sunol Molecular Corp. to expedite the discovery of new drug candidates designed to inhibit Tissue Factor/VIIa for our cardiovascular program. Under the terms of this agreement, Sunol conducts research and supplies us with tissue factor for our drug design program.

### **Parainfluenza Hemagglutinin Neuraminidase**

The parainfluenza virus, or PIV, affects approximately three million infants and young children per year in the United States. Complications arising from infection with PIV result in a significant portion of the cases of croup, bronchitis and pneumonia in children. 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, St. Jude Children's Hospital, University of Bath and University of St. Andrews will provide us with compounds that will form the basis for our design and development of potential drug candidates for the treatment of PIV.



## 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 allows additional analysis and compound modification at each stage of the biological evaluation. This capability makes structure-based drug design a powerful tool for rapid and 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, 1997, 1998 and 1999, we spent an aggregate of \$27.6 million on research and development. Approximately \$16.8 million of that amount was spent on in-house research and development, and \$10.8 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 which we will share resources and technology to develop inhibitors of complement enzymes. The agreement combines our capabilities in structure-based drug design with the selection power of 3-Dimensional Pharmaceuticals' Directed Diversity(R) 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 agreement, the companies are responsible for their own research costs. If a drug candidate emerges as a result of the joint research, the companies will negotiate the product development and commercialization rights and responsibilities.

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

We have entered into an exclusive worldwide license agreement with PRI 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 million milestone payment from PRI in connection with the initiation of Phase III clinical trials of RWJ-270201, PRI's oral influenza neuraminidase inhibitor, in North America and Europe. In addition, we may receive additional cash payments upon achievement of specified developmental and regulatory milestones and royalties on product sales, if any.

PRI will be responsible for research and development of the compounds, including expenses. Ortho-McNeil will market products approved by the FDA for marketing in the United States. Other Johnson & Johnson companies, including Janssen-Cilag, will market products approved for marketing outside the United States.

#### **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 not 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.

The initial focus of the agreement will be on identifying compounds that work to inhibit the coagulation cascade of Tissue Factor/VIIa. Tissue Factor/VIIa is a promising target for the development of anticoagulants for cardiopulmonary bypass surgery, angioplasty and other cardiovascular disorders. Sunol will produce Tissue Factor and provide us with quantities of the protein to assist in the identification of inhibitors specific to the activity of Tissue Factor/VIIa.

#### **Torii Pharmaceutical Co., Ltd.**

In 1996, we granted Torii an exclusive license, with the right to sublicense, develop, manufacture and commercialize BCX-34 and certain other PNP inhibitor compounds in Japan for the treatment of rheumatoid arthritis, T-cell cancers and atopic dermatitis. Torii terminated the exclusive license agreement, and the rights to develop, manufacture and commercialize BCX-34 and certain other PNP inhibitor compounds in Japan reverted to us. Torii paid us an aggregate of \$4.0 million for license fees, milestone payments and an equity investment.

#### **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. Bugg, was the previous Director of the UAB Center for Macromolecular Crystallography, and our President and Chief Operating Officer, Dr. 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 124 full-time staff members and approximately \$20.7 million in research grants and contract funding in 1998. Three of our early programs, PNP, influenza and complement inhibitors, originated at UAB. When we were founded in 1986, we entered into an agreement with UAB which 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 certain royalties on sales of any resulting product and to share in future payments received from other third-party collaborators. UAB has received and will continue to receive a portion of any license fees, milestone payments and royalties we receive from PRI and Ortho-McNeil 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 (PIV). Under the agreement, these organizations will provide us with compounds 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.

### **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.

To date, we have been issued seven U.S. patents which expire between 2009 and 2015 and relate to our PNP inhibitor compounds. We have also been issued a U.S. patent covering a manufacturing process for our PNP inhibitors, which expires in 2015, and have filed a patent application for new processes to prepare BCX-34 and other PNP inhibitors. The U.S. Patent and Trademark Office has also issued to us a U.S. patent relating to inhibitors of influenza neuraminidase, which expires in 2015. We have also tried to protect our technology through the following patent applications which are still pending: a U.S. patent application, three provisional U.S. patent applications and a patent cooperation treaty (PCT) application related to our neuraminidase inhibitors; a PCT application and a provisional U.S. patent application related to compounds and methods for detecting influenza virus; a PCT application related to complement inhibitors; a provisional application relating to inhibiting T-cell proliferation; and a provisional U.S. application related to deazaguanine analogs. 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 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.

## 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, RWJ-270201 will likely be the third influenza neuraminidase inhibitor to the market behind the influenza neuraminidase inhibitors currently marketed by Glaxo Wellcome 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 Glaxo Wellcome and Hoffmann-La Roche will play a major role in establishing the influenza treatment market and creating a demand for neuraminidase inhibitors on which Ortho-McNeil 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, certain 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. 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, Glaxo Wellcome's influenza neuraminidase inhibitor has received approval from the FDA, and they recently received approval 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 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 addition, other therapies for the treatment or prevention of flu include vaccines and the drugs amantadine and rimantadine. There is also a vaccine currently in preclinical development that may immunize people against all strains of the flu virus, rendering flu drug products like ours obsolete.

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:

- o delays;
- o warning letters;
- o fines;
- o product recalls or seizures;
- o injunctions;
- o penalties;
- o refusal of the FDA to review pending market approval applications or supplements to approval applications;
- o total or partial suspension of production;
- o civil penalties;
- o withdrawals of previously approved marketing applications; and
- o 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 eight 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 trial, we conduct a Phase II trial to assess safety and efficacy and establish the optimal dose in patients. If Phase II trial is successful, we or our licensees conduct a Phase III trial to verify the results in a larger patient population. A Phase III trial is 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:

- o the size of the patient population we intend to treat;
- o the availability of patients;
- o the willingness of patients to participate; and
- o the patient meeting the eligibility criteria.

Delays in planned patient enrollment may result in increased expense.

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 need. 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 regulations. Good manufacturing practice 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 good manufacturing practice 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.

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, that 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. As a consequence, our ongoing and future clinical studies may receive increased scrutiny, which may delay the regulatory review process.

Also in June 1996, the FDA investigated one of the clinical trial sites that participated in our 1995 Phase II dose-ranging studies of BCX-34 applied to the skin for the treatment of cutaneous T-cell lymphoma and psoriasis. As a result, the FDA issued a Form FDA 483 to the principal investigator at a clinical site which cited a number of deficiencies, including:

- o improper delegations of authority by the principal investigator;
- o failures to follow the protocols;
- o deviations from established procedures of the institutional review board; and
- o discrepancies or deficiencies in documentation and reporting.

Following the failure of BCX-34 applied to the skin in 1997, we discontinued the development of BCX-34 applied to the skin. In November 1997, the FDA notified us that they would not accept work performed by the deficient investigator without further validation. The majority of the work performed by this investigator was for BCX-34 applied to the skin, which was discontinued in 1997. However, work performed by this investigator for oral BCX-34 will not be accepted by the FDA to support efficacy in any new drug application.

## Human Resources

As of February 29, 2000, we had 60 employees, of whom 46 were engaged in research and development and 14 were in general and administrative functions. Our scientific staff, 20 of whom hold Ph.D. or M.D. degrees, has diversified experience in biochemistry, pharmacology, X-ray crystallography, synthetic organic chemistry, computational chemistry, medicinal chemistry and pharmacology. 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) ..... Alabama	Professor of Medicine and the Director of The University of  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. .... Cornell	Professor and Chairman of the Department of Pharmacology of  Medical College and the Revlon Pharmaceutical Professor of Pharmacology and Toxicology.
Herbert A. Hauptman, Ph.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).
Yuichi Iwaki, M.D., Ph.D. ....	Professor of Urology and Pathology, University of Southern California School of Medicine.
Hamilton O. Smith, M.D. ....  Prize	Director of DNA Resources at Celera Genomics Corporation, Professor, Molecular Biology and Genetics Department at The Johns Hopkins University School of Medicine, retired. Recipient of the Nobel  in Medicine (1978).

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. One member of the scientific advisory board, Dr. Gordon N. Gill, is a member of the



Board of Directors of the Agouron Institute. The Agouron Institute is a shareholder in, and has had contractual relationships with, Agouron Pharmaceuticals, Inc., a subsidiary of Warner-Lambert, that uses a core technology similar to ours.

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 42,950 square feet of leased office space in Riverchase Industrial/Research Park in Birmingham, Alabama. The lease runs through June 30, 2003 with an option to lease for an additional three 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.

## PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

The Company's common stock trades on the Nasdaq National Market tier of The Nasdaq Stock Market<sup>SM</sup> under the symbol BCRX. The following table sets forth the low and high prices as reported by Nasdaq for each quarter in 1999 and 1998:

	1999		1998	
High	Low	High	Low	
-----	-----	-----	-----	
First quarter 9.50	\$ 6.38	\$11.00	\$ 6.88	\$
Second quarter 9.13	6.38	9.50	6.00	
Third quarter 8.00	8.38	35.31	6.00	
Fourth quarter 8.44	18.50	30.25	4.38	

The last sale price of the common stock on February 29, 2000 as reported by Nasdaq was \$27.00 per share.

As of February 29, 2000, there were approximately 431 holders of record of the common stock.

The Company has never paid cash dividends and does not anticipate paying cash dividends in the foreseeable future.

### ITEM 6. SELECTED FINANCIAL DATA

	Years Ended December 31, (Dollars in thousands, except per share)				
	1999	1998	1997	1996	1995
Statement of Operations Data:					
Total revenues	\$ 5,328	\$ 7,626	\$ 2,693	\$ 2,652	\$ 885
Research and development expenses	7,683	9,291	10,577	7,586	7,107
Net loss	(5,298)	(4,785)	(10,619)	(7,698)	(8,576)
Net loss per share	(.34)	(.34)	(.77)	(.69)	(.96)
Weighted average shares outstanding (in thousands)	15,380	14,120	13,780	11,171	8,905

	December 31, (Dollars in thousands)				
	1999	1998	1997	1996	1995
Balance Sheet Data:					
Cash, cash equivalents and securities	\$ 70,047	\$ 27,012	\$ 24,643	\$ 35,785	\$ 11,414
Total assets	73,387	29,100	26,485	37,149	13,056
Accumulated deficit	(58,467)	(53,170)	(48,384)	(37,766)	(30,067)
Total stockholders' equity	71,403	27,682	25,285	35,403	11,326



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

This Annual Report 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:

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

Our revenues have generally been limited to license fees, milestone payments, interest income, collaboration research, development and option fees. Research and development revenue on cost-reimbursing agreements is recognized as expenses are incurred up to contractual limits. Research and development revenues, license fees, milestone payments and option fees are recognized as revenue when irrevocably due. Payments received that are related to future performance are deferred and taken into income as earned over a specified future performance period. We have not received any revenue from the sale of pharmaceutical products. It could be several years, if ever, before we will recognize significant revenues from royalties received pursuant to our license agreements, and we do not expect to ever generate revenues directly from product sales. Future revenues, if any, are likely to fluctuate substantially from quarter to quarter.

We have incurred operating losses since our inception. Our accumulated deficit at December 31, 1999 was \$58.5 million. We will require substantial expenditures relating to the development of our current and future drug candidates. During the three years ended December 31, 1999, we spent 39.0% of our research and development expenses on contract research and development, including:

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

- o engaging investigators to conduct clinical trials;
- o hiring contract research organizations to monitor and gather data on clinical trials; and
- o 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. Changes in our existing and future research and development and collaborative relationships will also impact the status of our research and development projects. While 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 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, 1999 Compared with the Year Ended December 31, 1998**

Collaborative and other research and development revenue decreased 60.8% to \$2,499,679 in 1999 from \$6,371,095 in 1998, primarily due to a \$2.0 million milestone payment received from PRI and Ortho-McNeil in 1999 compared to the \$6.0 million in up front fees received from PRI and Ortho-McNeil in 1998 for a license agreement for the Company's influenza neuraminidase inhibitors. Litigation settlement increased to \$1.2 million in 1999, representing the settlement of a lawsuit concerning a misfiling of a foreign patent by the Company's former patent counsel. Interest and other income increased 29.8% to \$1,629,046 in 1999 from \$1,254,881 in 1998, primarily due to an increase in the weighted average investment for 1999 as a result of the Company's public offering in November 1999.

Research and development expenses decreased 17.3% to \$7,682,862 in 1999 from \$9,291,146 in 1998. The decrease is primarily attributable to a decrease in costs associated with conducting clinical trials. Such expenses vary from period to period based on the status of the Company's projects.

General and administrative expenses decreased 5.4% to \$2,938,494 in 1999 from \$3,104,925 in 1998. The decrease was primarily due to one-time fees incurred in connection with the license agreement (and related agreements) for the Company's influenza neuraminidase inhibitors signed in September 1998.

#### **Year Ended December 31, 1998 Compared with the Year Ended December 31, 1997**

Collaborative and other research and development revenue increased 537.1% to \$6,371,095 in 1998 from \$1,000,000 in 1997, primarily due to the \$6.0 million in up front fees received from PRI and Ortho-McNeil in 1998 for a license agreement for the Company's influenza neuraminidase inhibitors compared to the \$1.0 million milestone payment received from Torii in 1997. Interest and other income decreased 25.9% to \$1,254,881 in 1998 from \$1,692,521 in 1997, primarily due to a decline in the weighted average investment for 1998.

Research and development expenses decreased 12.2% to \$9,291,146 in 1998 from \$10,577,369 in 1997. Such expenses vary from period to period based on the status of the Company's projects. The Company completed two Phase III clinical trials in 1997. In 1998, the Company commenced two Phase I clinical trials for its serine protease inhibitor, continued its two Phase I/II clinical trials for an oral formulation of its PNP inhibitor and initiated preclinical studies for its influenza neuraminidase and serine protease inhibitors. Overall, the decline in costs associated with the Company's PNP inhibitor project were partially offset by the increases in the Company's serine protease and influenza neuraminidase projects. As a result, there was a slight decrease in 1998 in the outside research and development efforts associated with the Company's three primary research and development projects. The Company also reduced some of its other discretionary costs, which was offset by one-time costs associated with signing a license agreement for the Company's influenza neuraminidase inhibitors and certain related agreements in September 1998.

General and administrative expenses increased 15.8% to \$3,104,925 in 1998 from \$2,682,137 in 1997. The increase was primarily due to the fees and expenses incurred in connection with the license agreement (and related agreements) for the Company's influenza neuraminidase inhibitors signed in September 1998.

Interest expense decreased 71.1% to \$14,986 in 1998 from \$51,880 in 1997. The decrease was primarily due to a decline in capitalized lease obligations resulting in lesser interest expense.

### **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:

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

At December 31, 1999, our cash, cash equivalents and securities held-to-maturity were \$70.0 million, an increase of \$43.0 million from December 31, 1998, principally due to the \$46.8 million follow-on equity offering offset by the cash used in operations.

We have financed some of our equipment purchases with lease lines of credit. We currently have a \$500,000 line of credit with our bank to finance capital equipment. In January 1992, we entered into an operating lease for our current facilities which expires on June 30, 2003. We have an option to renew the lease for an additional three years at current market rates. The operating lease requires us to pay monthly rent ranging from \$23,803 and escalating annually to a minimum of \$26,011 per month in the final year, and a pro rata share of operating expenses and real estate taxes in excess of base year amounts.

At December 31, 1999, we had long-term capital lease and operating lease obligations which provide for aggregate minimum payments of \$301,171 in 2000, \$299,253 in 2001 and \$300,828 in 2002.

Under the terms of our license agreement with The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil for the development and commercialization of our influenza neuraminidase inhibitors, 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 1998. 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 addition, we may receive cash payments upon specified developmental and regulatory milestones and royalties on product sales, if any. We cannot assure you that The R.W. Johnson Pharmaceutical Research Institute or Ortho-McNeil 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 sales of licensed products.

We previously entered into an exclusive license agreement with Torii under which Torii paid us \$1.5 million in initial license fees and made a \$1.5 million equity investment in us in 1996. The first milestone payment of \$1.0 million was received in 1997. This exclusive license agreement was terminated by Torii in July 1999.

We plan to finance our needs principally from the following:

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

We believe that our available funds will be sufficient to fund our operations at least through 2002. 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:

- o the progress of our research, drug discovery and development programs;
- o changes in existing collaborative relationships;
- o our ability to establish additional collaborative relationships;
- o the magnitude of our research and development programs;
- o the scope and results of preclinical studies and clinical trials to identify drug candidates;
- o competitive and technological advances;
- o the time and costs involved in obtaining regulatory approvals;
- o the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims;
- o our dependence on others, including The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil, for development and commercialization of our product candidates, in particular, our neuraminidase inhibitors; and
- o 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, on 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.

## Year 2000 Issue

We successfully completed our year 2000 plan prior to year end and have not experienced any significant problems in the year 2000. The costs incurred to implement the year 2000 plan were not material.

### 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 we expect our losses to increase as our research and development efforts progress. As of December 31, 1999, our accumulated deficit was approximately \$58.5 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 under our existing license agreements or 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 financings. 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.

If The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil were to terminate, substantially modify or fail to fulfill their obligations under their license agreement with us, we would lose substantially all of our revenue

If The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil change their exclusive worldwide license agreement with us, including by terminating it or failing to fulfill their obligations, we would lose substantially all of our revenue. Approximately 46.9 % of our revenues for the year ended December 31, 1999 and approximately 83.5% of our revenues for the year ended December 31, 1998 resulted from this license agreement. These revenues represent approximately 40.6% of our total revenues since our inception in 1986.

Under this agreement, The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil have several rights that could delay or stop the development of our flu drug candidate, including sole discretion on all elements of research and development of RWJ-270201, including timing and design of further clinical trials, sole control over the amount of resources devoted to the research and development of RWJ-270201 and the right to terminate or cancel the agreement, which they may do at any time on four months notice.

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:

- o discovery of proteins that cause or enable biological reactions necessary for the progression of the disease or disorder, called enzyme targets;
- o execution of some preclinical studies and late-stage development for our compounds and drug candidates; and
- o 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, 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 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, manufacture, 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:

- o these contracts may expire or the other parties to the contract may terminate them, as was the case with our Torii Pharmaceutical Co., Ltd. contract;
- o our partners may choose to pursue alternative technologies, including those of our competitors;
- o we may have disputes with a partner that could lead to litigation or arbitration;
- o our partners may not devote sufficient capital or resources towards our drug candidates; and
- o our partners may not comply with applicable government regulatory requirements.

Any problems encountered with our 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.

We licensed our drug candidate, RWJ-270201, to Ortho-McNeil and to PRI, who is conducting Phase III clinical trials. However, the Phase III clinical trials may not be successful. Even if PRI completes the Phase III trials, we do not know when, if ever, it will receive FDA or foreign regulatory agency approvals for, or when Ortho-McNeil will begin marketing of, RWJ-270201. If PRI is 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 RWJ-270201 will harm our business.

Even if the results of PRI's trials are positive, a product is not likely to be commercially available for one 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 all of our preclinical research data at our facilities and do not store duplicate copies off-site. We could lose important preclinical data if our facilities incur 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:

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

In June 1995, we notified the FDA that we submitted incorrect efficacy data for our Phase II trials of BCX-34 applied to the skin for the treatment of cutaneous T-cell lymphoma and psoriasis. Cutaneous T-cell lymphoma is a skin cancer in which T-cells, which normally help fight disease in the body, duplicate rapidly and cause skin cancer. Psoriasis is a disease where the immune system attacks the body's own skin cells. The FDA inspected us and issued to us Lists of Inspectional Observations, on Form FDA 483, that cited our failure to follow good clinical practices. The FDA also issued a Form FDA 483 to a principal investigator at a clinical trial site, and the FDA notified us that they will not accept any work performed by this investigator without further validation. Because of these investigations by the FDA, our ongoing and future clinical studies or trials may receive increased scrutiny, which would 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 our influenza neuraminidase inhibitors, may not gain the market acceptance required for us to be profitable even after they receive approval for sale by the FDA or foreign regulatory agencies. Influenza neuraminidase inhibitors are drugs designed to stop the spread of the flu virus in the body. The degree of market acceptance of any drug candidates that we or our partners develop will depend on a number of factors, including:

- o cost-effectiveness of our drug candidates;
- o their safety and effectiveness relative to alternative treatments, such as existing drugs amantadine and rimantadine, Hoffmann-La Roche's and Glaxo Wellcome's influenza neuraminidase inhibitors; or vaccines for prevention of influenza;
- o reimbursement policies of government and third-party payors; and
- o marketing and distribution support for our drug candidates.

Physicians, patients, payors 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, RWJ-270201, 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 RWJ-270201 to the market. If approved, RWJ-270201 will be, at best, the third neuraminidase inhibitor to the market, because the FDA approved Glaxo-Wellcome plc's neuraminidase inhibitor product in the U.S. and in several other countries, and because the FDA also approved Hoffman-La Roche's neuraminidase inhibitor. Both Glaxo-Wellcome and Hoffmann-La Roche, the companies responsible for the development and marketing of the two neuraminidase inhibitors that reached the market before RWJ-270201, are large multinational pharmaceutical companies that have significant financial, technical and human resources and could therefore establish brand recognition and loyalty with consumers before RWJ-270201 is on the market. In addition, a vaccine is currently in preclinical development that may immunize people against all strains of the flu virus, rendering flu drug products like ours obsolete. 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. To date, the U.S. Patent and Trademark Office has issued to us nine U.S. patents for our various inventions. 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:

- o the degree and range of protection any patents will afford against competitors with similar products;
- o if and when patents will issue; or
- o 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:

- o obtain licenses or redesign our products or processes to avoid infringement;
- o stop using the subject matter claimed in those patents; or
- o 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 judgement 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. Although we maintain, and are the beneficiary of, a \$2.0 million key-man insurance policy on the life of Charles E. Bugg, Ph.D., Chairman of the Board of Directors and Chief Executive Officer, we do not believe the proceeds would be adequate to compensate for his loss. We are actively seeking additional members for our senior management team. 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 payors may not authorize or otherwise budget for the reimbursement of our products. Governmental and third-party payors are increasingly challenging the prices charged for medical products and services. We cannot be sure that third-party payors 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.

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 is expensive, difficult to obtain and 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, we may suffer more harm than other companies

Our drug development activities depend on the security, integrity and performance of the computer systems supporting them, and the failure of our computer systems would delay or stop our drug development efforts. We currently store all of our preclinical and clinical data at our facilities, do not store duplicate copies of all data off-site and could lose important data if our systems were impaired. 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. We have not undertaken formal system protections, do not have a detailed emergency plan and any system failure could harm our business and operations. We are in the process of upgrading our computer network and systems company-wide. Software we are currently installing is designed to automatically archive critical scientific raw data. We are purchasing additional hardware that is designed to keep us operational in case of computer system failure.

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 26.6% of our outstanding common stock. 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.

In addition, our certificate of incorporation provides for staggered terms for the members of the board of directors and super majority 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. The 52-week range of the market price of our stock has ranged from \$6.38 to \$37.25 per share, which is a significantly greater change than that experienced by many other companies. 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:

- o announcements of technological innovations or new products by us or our competitors;
- o developments or disputes concerning patents or proprietary rights;
- o our licensees achieving or failing to achieve development milestones;
- o publicity regarding actual or potential medical results relating to products under development by us or our competitors;
- o regulatory developments in both the United States and foreign countries;
- o public concern as to the safety of pharmaceutical products;
- o actual or anticipated fluctuations in our operating results;
- o changes in financial estimates or recommendations by securities analysts;
- o economic and other external factors or other disasters or crises; and
- o period-to-period fluctuations in our financial results.

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

The primary objective of our investment activities is to preserve principal while at the same time maximize 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 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

	December 31,	
	1999	1998
Assets		
Cash and cash equivalents (Notes 1 and 3)	\$ 8,631,447	\$ 12,311,348
Securities held-to-maturity (Notes 1 and 3)	14,545,471	9,961,017
Prepaid expenses and other current assets	1,376,734	598,463
Total current assets	24,553,652	22,870,828
Securities held-to-maturity (Notes 1 and 3)	46,870,573	4,739,728
Furniture and equipment, net (Notes 1 and 2)	1,780,900	1,407,780
Patents and licenses, less accumulated amortization of \$3,103 in 1999 and \$1,991 in 1998 (Note 1)	181,771	81,723
Total assets	\$ 73,386,896	\$ 29,100,059
Liabilities and Stockholders' Equity		
Accounts payable	\$ 291,545	\$ 243,075
Accrued expenses (Note 4)	447,904	611,455
Deferred revenue (Note 1)	700,000	--
Accrued taxes, other than income (Note 4)	93,619	136,726
Accrued vacation	128,489	91,919
Current maturities of capital lease obligations (Note 5)	14,970	12,603
Total current liabilities	1,676,527	1,095,778
Capital lease obligations (Note 5)	6,896	21,866
Deferred license fee (Note 9)	300,000	300,000
Stockholders' equity (Notes 7 and 8):		
Preferred stock, \$.01 par value, shares authorized- 5,000,000; none issued and outstanding		
Common stock, \$.01 par value; shares authorized - 45,000,000; shares issued and outstanding - 17,263,878 - 1999; 14,960,088 - 1998	172,639	149,600
Additional paid-in capital	129,698,040	80,702,381
Accumulated deficit	(58,467,206)	(53,169,566)
Total stockholders' equity	71,403,473	27,682,415
Commitments and contingency (Notes 5 and 9)		
Total liabilities and stockholders' equity	\$ 73,386,896	\$ 29,100,059

See accompanying notes to financial statements.



## STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	1999	1998	1997
Revenues:			
Collaborative and other research and development (Notes 1 and 9)	\$ 2,499,679	\$ 6,371,095	\$ 1,000,000
Litigation settlement	1,200,000	--	--
Interest and other	1,629,046	1,254,881	1,692,521
Total revenues	5,328,725	7,625,976	2,692,521
Expenses:			
Research and development	7,682,862	9,291,146	10,577,369
General and administrative	2,938,494	3,104,925	2,682,137
Interest	5,009	14,986	51,880
Total expenses	10,626,365	12,411,057	13,311,386
Net loss	\$ (5,297,640)	\$ (4,785,081)	\$ (10,618,865)
Net loss per share (Note 1)	\$ (.34)	\$ (.34)	\$ (.77)
Weighted average shares outstanding (Note 1)	15,380,100	14,120,364	13,779,698

See accompanying notes to financial statements.

## STATEMENTS OF STOCKHOLDERS' EQUITY

	Common Stock	Additional Paid-in Capital	Accumulated Deficit	Total Stock- Holders' Equity
Balance at December 31, 1996	\$ 136,977	\$ 73,031,864	\$ (37,765,620)	\$ 35,403,221
Exercise of stock options, 79,670 shares	797	272,389		273,186
Employee stock purchase plan sales, 15,933 shares	160	163,632		163,792
Exercise of warrants, 24,330 shares	243	(274)		(31)
Compensation cost		63,493		63,493
Net loss			(10,618,865)	(10,618,865)
Balance at December 31, 1997	138,177	73,531,104	(48,384,485)	25,284,796
Sale of common stock, 918,836 shares	9,188	5,937,047		5,946,235
Exercise of stock options, 144,102 shares	1,441	614,655		616,096
Employee stock purchase plan sales, 23,597 shares	236	144,010		144,246
Exercise of warrants, 55,806 shares	558	295,842		296,400
Compensation cost		179,723		179,723
Net loss			(4,785,081)	(4,785,081)
Balance at December 31, 1998	149,600	80,702,381	(53,169,566)	27,682,415
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)
Balance at December 31, 1999	\$ 172,639	\$ 129,698,040	\$ (58,467,206)	\$ 71,403,473
	=====	=====	=====	=====

See accompanying notes to financial statements.

## STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	1999	1998	1997
Operating activities:			
Net loss	\$ (5,297,640)	\$ (4,785,081)	\$(10,618,865)
Adjustments to reconcile net loss to net cash used in operating activities-			
Depreciation and amortization	523,530	529,124	648,935
Amortization of patents and licenses	1,112	1,991	--
Non-monetary compensation cost	54,723	179,723	63,493
Changes in operating assets and liabilities-			
Prepaid expenses and other assets	(778,271)	(383,686)	18,677
Accounts payable	48,470	(2,105)	(370,253)
Accrued expenses	(163,551)	305,022	65,555
Deferred revenue	700,000	--	--
Accrued taxes, other than income	(43,107)	(29,451)	(43,777)
Accrued vacation	36,570	2,142	6,500
Net cash used in operating activities	(4,918,164)	(4,182,321)	(10,229,735)
Investing activities:			
Purchases of furniture and equipment	(896,650)	(379,367)	(1,075,682)
Purchases of other assets	(101,160)	(14,786)	(68,928)
Purchase of marketable securities	(60,058,059)	(13,564,857)	(12,200,183)
Maturities of marketable securities	13,342,760	19,750,500	23,462,683
Net cash (used in)/provided by investing activities	(47,713,109)	5,791,490	10,117,890
Financing activities:			
Principal payments of debt and capital lease obligations	(12,603)	(57,896)	(254,547)
Capital leases	--	--	50,763
Exercise of stock options	2,006,378	616,096	273,186
Employee Stock Purchase Plan stock sales	179,970	144,246	163,792
Exercise of warrants	--	296,400	(31)
Sale of common stock, net of issuance costs	46,777,627	5,946,235	--
Net cash provided by financing activities	48,951,372	6,945,081	233,163
Increase (decrease) in cash and cash equivalents	(3,679,901)	8,554,250	121,318
Cash and equivalents at beginning of period	12,311,348	3,757,098	3,635,780
Cash and cash equivalents at end of period	\$ 8,631,447	\$ 12,311,348	\$ 3,757,098

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 five research projects, of which one has been licensed to The R. W. Johnson Pharmaceutical Research Institute, or PRI, and Ortho-McNeil Pharmaceutical, Inc., both Johnson & Johnson companies, for clinical development. 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

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 and warrants are excluded from the computation as their effect is anti-dilutive. Common stock equivalents of approximately 2,422,245, 2,469,348 and 2,267,176 shares were not used to calculate net loss per share in 1999, 1998 and 1997, 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 held-to-maturity. At December 31, 1999, securities held-to-maturity consisted of \$60,419,290 of U.S. Agency securities and \$996,754 of high-grade domestic corporate debt carried at amortized cost. All of the non-current portion of securities held-to-maturity are U.S. Agency securities that mature in 2001-3. The estimated fair value of all these securities at December 31, 1999 approximated \$60,042,956.

#### 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 ("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.

## Revenue Recognition

Research and development revenue on cost-reimbursement agreements is recognized as expenses are incurred, up to contractual limits. Research and development revenues, license fees and option fees are recognized as revenue when irrevocably due. Payments received which are related to future performance are deferred and taken into income as earned over a specified future performance period.

## 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. Consequently, no compensation expense 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 1998 and 1997 financial statements have been reclassified to conform to the 1999 financial statements. 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:

	1999	1998
Furniture and fixtures	\$ 596,404	\$
626,756		
Laboratory equipment	1,527,775	
1,263,873		
Leased equipment	50,763	
153,937		
Leasehold improvements	1,503,426	
1,179,730		
-----	-----	
	3,678,368	
3,224,296		
Less accumulated depreciation and amortization	1,897,468	
1,816,516		
-----	-----	
Furniture and equipment, net	\$1,780,900	
\$1,407,780		
=====	=====	

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 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 one year. The Company has not realized any losses from such investments. At December 31, 1999,

approximately \$7,605,735 is invested in the Fidelity Institution Cash Portfolio, which invests in treasury notes and repurchase agreements. The Fidelity Institution Cash Portfolio is not insured.

**Note 4 - Accrued Expenses and Taxes**

Accrued expenses and taxes were comprised of the following at December 31:

1998	1999	
----	----	
Accrued clinical trials	\$202,524	
\$427,161		
Accrued bonus	80,000	
50,000		
Stock purchase plan withholdings	110,523	
82,356		
Accrued other	54,857	
51,938		
-----	-----	
Accrued expenses	\$447,904	
\$611,455		
=====	=====	
Accrued franchise tax	\$ 21,330	\$
86,540		
Accrued other	72,289	
50,186		
-----	-----	
Accrued taxes, other than income	\$ 93,619	
\$136,726		
=====	=====	

**Note 5- Capital Lease Obligations**

The Company paid \$5,009, \$14,986 and \$51,880 in interest on debt and lease obligations for the years ended December 31, 1999, 1998 and 1997, respectively. The Company had an unused line of credit of \$500,000 at December 31, 1999.

The Company has the following capital lease obligations and operating leases at December 31, 1999:

	Capital Leases	Operating Leases
	-----	
-----		
2000	\$ 17,615	\$
283,556		
2001	7,191	
292,062		
2002	--	
300,828		
2003	--	
153,792		
-----		
Total minimum payments	24,806	
\$1,030,238		
=====		
Less interest	2,940	
	-----	
Present value of future minimum payments	21,866	
Less current portion	14,970	
	-----	
Non-current portion	\$ 6,896	
	=====	

Rent expense for operating leases was \$348,177, \$299,811 and \$186,004 in 1999, 1998 and 1997, respectively.

#### 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 \$26,650,000 and \$23,100,000 at December 31, 1999 and 1998, 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 \$26,650,000 and \$23,100,000 at December 31, 1999 and 1998, respectively, which will remain until it is more likely than not that the related tax benefits will be realized.

At December 31, 1999, the Company had net operating loss and research and development credit carryforwards ("Carryforward Tax Benefits") of approximately \$56,400,000 and \$5,000,000, respectively, which will expire in 2005 through 2019. 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

### Warrants

During 1998, warrants were exercised to purchase 49,400 shares with cash and warrants were exercised to purchase 6,406 shares via net issue exercise by giving up warrants to purchase 92,394 shares. During 1997, warrants to exercise 24,330 shares were exercised via net issue exercise by giving up warrants to purchase 25,875 shares. There were no warrants outstanding at December 31, 1999 and 1998.

### Options

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 for the incentive stock options shall not be less than the fair market value of common stock on the grant date. The option price per share for non-statutory stock options may not be less than 85% of the fair market value of common stock on the date of grant. 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.

There are an aggregate of 2,826,237 shares reserved for future issuance for the options and the Stock Purchase Plan discussed in Note 7.

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 commencing in 1996. 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 1999. 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 1999, 1998 and 1997, respectively: no dividends, expected volatility of 69.2, 65.6 and 57.8 percent, risk-free interest rate of

6.1, 4.9 and 6.0 percent and expected lives of five years. The weighted-average grant-date fair values of options granted during 1999 under the Stock Option and Employee Stock Purchase Plans were \$12.56 and \$2.85, respectively. Had the Company adopted Statement No. 123 and determined its compensation cost based on the fair value at the grant dates in 1999, 1998 and 1997, the Company's net loss and net loss per share would have been increased to the pro forma amounts shown below:

		1999	1998	1997
Net loss	As reported	\$ (5,297,640)	\$ (4,785,081)	\$ (10,618,865)
	Pro forma	(7,179,691)	(6,363,575)	(11,657,646)
Net loss per share	As reported	(.34)	(.34)	(.77)
	Pro forma	(.47)	(.45)	(.85)

The stockholders on April 16, 1993 and on March 1, 1994 (approving the Board of Directors' action of December 1993) authorized an amended and restated 1991 Stock Option Plan and approved an additional 1,000,000 shares of common stock for issuance ("Amended Plan"). The Amended Plan includes an increase of common stock reserved for issuance to 1,500,000 shares and establishes an automatic option grant program. The automatic option grant program grants options to new non-employee Board members to purchase 25,000 shares of common stock at an exercise price of the fair market value at the grant date for a maximum of ten years and is subject to vesting restrictions and early termination upon the optionee's cessation of Board service. The vesting and exercise provisions of the options issued under the Amended Plan are subject to acceleration, under certain circumstances, upon the occurrence of a hostile tender offer for more than 50% of the outstanding stock of the Company or if the Company is acquired. On May

29, 1995, the stockholders approved extending the automatic option grant to cover non-employee Board members not previously eligible for an automatic grant and approved an additional 500,000 shares of common stock for issuance, increasing the common stock reserved for issuance to 2,000,000 shares. On May 14, 1997, the stockholders approved increasing the automatic option grant to 40,000 shares and approved an additional 1,000,000 shares (of which 75,576 were approved by the Board of Directors in 1996) of common stock for issuance, increasing the common stock reserved for issuance to 3,000,000 shares. On May 12, 1999, the stockholders approved an additional 400,000 shares of common stock for issuance, increasing the common stock reserved for issuance to 3,400,000 shares. The following is an analysis of stock options for the three years ending December 31, 1999:

	Options Available	Options Outstanding	Weighted Average Exercise
Price			
Balance December 31, 1996	66,475	1,841,722	\$7.06
Option plan amended	924,424		
Options granted	(590,810)	590,810	10.21
Options exercised		(87,450)	4.02
Options canceled	139,850	(139,850)	10.33
	-----	-----	
Balance December 31, 1997	539,939	2,205,232	7.82
Options granted	(495,400)	495,400	6.88
Options exercised		(144,102)	4.28
Options canceled	77,016	(77,016)	10.38
	-----	-----	
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
	-----	-----	
Balance December 31, 1999	174,451	2,548,804	9.80
	=====	=====	

There were 1,595,099, 1,456,715 and 1,254,263 options exercisable at December 31, 1999, 1998 and 1997, respectively. The weighted-average exercise price for options exercisable was \$7.60, \$6.94 and \$5.84 at December 31, 1999, 1998 and 1997, respectively.

The following table summarizes at December 31, 1999, 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	456,389	3.7	\$3.76	456,389	\$3.76
5 to 8	1,040,630	6.9	6.33	604,246	6.17
8 to 12	257,455	6.8	8.69	206,369	8.81
12 to 17	452,410	7.2	14.66	324,095	14.69
22 to 26	341,920	9.9	22.82	4,000	22.81
2 to 26	2,548,804	6.8	9.80	1,595,099	7.60

#### 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 contributions of \$151,287, \$57,137 and \$45,603 in 1999, 1998 and 1997, 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 102,982 shares remain available for purchase at December 31, 1999. 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 26,056, 23,597 and 15,933 shares of common stock purchased under the Stock Purchase Plan in 1999, 1998 and 1997, respectively, at a weighted average price of \$6.90, \$6.11 and \$10.28, respectively, per share.

**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 Factor D 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 funding required by the agreements for both projects in 1998.

In September 1998, the Company entered into a worldwide license agreement with PRI and Ortho-McNeil, both Johnson & Johnson companies, to develop and market products to treat and prevent viral influenza. Under the terms of the agreement, the Company received an initial \$6.0 million in 1998 and a milestone payment of \$2.0 million in 1999. The agreement provides for additional potential milestone payments and royalties based on future sales of licensed products. PRI and Ortho-McNeil are responsible for all development, regulatory and commercialization expenses. The agreement is subject to termination by PRI and Ortho-McNeil at any time and by the Company in certain circumstances. In addition, Johnson & Johnson Development Corporation ("JJDC"), another Johnson & Johnson company, made a \$6.0 million equity investment in the Company in connection with signing the license agreement.

**Note 10 - Quarterly Financial Information (Unaudited)(In thousands, except per share)**

	First	Second	Third	Fourth
1999 Quarters				
Revenues	\$ 539	\$ 2,502	\$ 335	\$ 1,952
Net (loss)	(2,400)	(251)	(2,206)	(441)
Net (loss) per share	(.16)	(.02)	(.15)	(.03)
1998 Quarters				
Revenues	\$ 382	\$ 289	\$ 6,249	\$ 706
Net income (loss)	(3,006)	(2,981)	2,667	(1,465)
Net income (loss) per share	(.22)	(.21)	.19	(.10)

## REPORT OF INDEPENDENT AUDITORS

The Board of Directors  
BioCryst Pharmaceuticals, Inc.

We have audited the accompanying balance sheets of BioCryst Pharmaceuticals, Inc. as of December 31, 1999 and 1998, and the related statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 1999. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with 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, 1999 and 1998 and the results of its operations and its cash flows for each of the three years in the period ended December 31, 1999, in conformity with accounting principles generally accepted in the United States.

*/s/Ernst & Young,*

*LLP*

*Birmingham, Alabama  
January 21, 2000*

**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:

Name -----	Age ---	Position(s) with the Company -----
Charles E. Bugg, Ph.D.	58	Chairman, Chief Executive Officer and Director
J. Claude Bennett, M.D.	66	President, Chief Operating Officer and Director
John A. Montgomery, Ph.D.	75	Senior Vice President, Secretary, Chief Scientific Officer and Director
Ronald E. Gray	59	Chief Financial Officer, Assistant Secretary and Treasurer (3)
W. Randall Pittman	46	Chief Financial Officer, Assistant Secretary and Treasurer (3)
John R. Urhin	47	Vice President, Corporate Development
William W. Featheringill (1)(2)	57	Director
Edwin A. Gee, Ph.D. (1)(2)	80	Director
Zola P. Horovitz, Ph.D.	65	Director
Joseph H. Sherrill, Jr.	58	Director
William M. Spencer, III (1)(2)	79	Director
Randolph C. Steer, M.D., Ph.D.	50	Director

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

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

(3) Mr. Gray held this position in 1999 and through January 9, 2000 and Mr. Pittman was named to this position on January 10, 2000.

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 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. Prior to joining the Company, Dr. Bennett was President of 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 also continues to hold the position of Distinguished University Professor Emeritus at UAB.

John A. Montgomery, Ph.D., has been a Director since November 1989 and has been 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 was a Founder of BioCryst. 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.

Ronald E. Gray joined BioCryst in January 1993 as Chief Financial Officer, a position he held until January 9, 2000. In 1994, Mr. Gray received the additional title of Assistant Secretary in December 1994 and Treasurer in January 1995. Effective January 10, 2000, Mr. Gray became a consultant to the Company, assisting in the transition to a new Chief Financial Officer. Prior to joining BioCryst, from June 1992 to September 1992, Mr. Gray was Chief Financial Officer of The ACB Companies, a collection agency. From July 1988 to March 1992, Mr. Gray was Chief Financial Officer and Secretary of Image Data Corporation, a medical imaging company. He was previously Vice President of Finance, Secretary and Treasurer of CyCare Systems, Inc., a health care information processing company.

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. 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 Med Partners, 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 Genetech, Inc. From 1987 to 1998, he held various management positions at Genetech, most recently as Director of Special Projects/Managed Care. Prior to working for Genetech, 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 and Chief Executive Officer, 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 management 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 pharmaceutical sciences and business development since his retirement from Bristol-Myers Squibb in April 1994. He serves on the Boards of Directors of Avigen, Inc., Clinitor Inc., Diacrin, Inc., Magainin Pharmaceuticals, Inc., HeavenlyDoor.com Corporation, Shire Pharmaceutical Corporation and Synaptic Pharmaceutical Corp. Dr. Horovitz is also non-executive Chairman of Magainin Pharmaceuticals, Inc.

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. He serves on the Board of Directors of Piranha, Inc., an information technology company.

William M. Spencer, III, was a founder and has been a Director of the Company since its inception. Mr. Spencer, who is retired, is also a private investor in Birmingham, Alabama. He 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.

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.

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 and Mr. Sherrill's terms expire at the 2002 annual meeting, Dr. Bennett's, Dr. Horovitz's, Mr. Spencer's and Dr. Steer's terms expire at the 2000 annual meeting and Dr. Bugg's, Dr. Montgomery's and Dr. Gee's terms expire at the 2001 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. These changes take effect over the next 18 months. 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 1991 Stock Option Plan.

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 to our definitive Proxy Statement to be filed in connection with the solicitation of proxies for our 2000 Annual Meeting of Stockholders.

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

Incorporated by reference to our definitive Proxy Statement to be filed in connection with the solicitation of proxies for our 2000 Annual Meeting of Stockholders.



## ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Incorporated by reference to our definitive Proxy Statement to be filed in connection with the solicitation of proxies for our 2000 Annual Meeting of Stockholders.

### PART IV

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

### (a) Financial Statements

Page in  
Form

10-K

The following financial statements appear  
in Item 8 of this Form 10-K:

Balance Sheets at December 31, 1999 and 1998	28
Statements of Operations for the years ended December 31, 1999, 1998 and 1997	29
Statements of Stockholders' Equity for the years ended December 31, 1999, 1998 and 1997	30
Statements of Cash Flows for the three years ended December 31, 1999, 1998 and 1997	31
Notes to Financial Statements	32 to 37
Report of Independent Auditors	38

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

Number	Description
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.
4.1	See Exhibits 3.1 and 3.2 for provisions of the Composite Certificate
10.1	of Incorporation and Bylaws of the Registrant defining rights of holders of Common Stock of the Registrant. 1991 Stock Option Plan, as amended and restated. Incorporated by reference to Exhibit 99.1 to the Company's Form S-8 Registration Statement (Registration No. 333-30751).
10.2	Amendment No. 1 to the 1991 Stock Option Plan, as amended and restated. Incorporated by reference to Exhibit 10.2 to the Company's
10.3	Form 10-Q for the second quarter ending June 30, 1999 dated August 12, 1999. Form of Notice of Stock Option Grant and Stock Option Agreement. Incorporated by reference to Exhibit 99.2 and 99.3 to the Company's Form S-8 Registration Statement (Registration No. 33-95062).
10.4	Warehouse Lease dated January 17, 1992 between Principal Mutual Life
	Insurance Company and the Registrant. Incorporated by reference to Exhibit 10.21 to the Company's Form S-1 Registration Statement (Registration No. 33-73868).



- 10.5 First Amendment to Lease Agreement between Registrant and Principal Mutual Life Insurance Company, Inc. for office/warehouse space. Incorporated by reference to Exhibit 10.21 to the Company's Form 10-K for the year ending December 31, 1994 dated March 28, 1995.
- 10.6 Second Amendment to Lease Agreement between Registrant and Principal Mutual Life Insurance Company, Inc. for office/warehouse space. Incorporated by reference to Exhibit 10.24 to the Company's Form 10-Q for the first quarter ending March 31, 1997 dated May 12, 1997.
- 10.7 Third Amendment to Lease Agreement between Registrant and Principal Mutual Life Insurance Company, Inc. for office/warehouse space. Incorporated by reference to Exhibit 10.24 to the Company's Form 10-Q for the first quarter ending March 31, 1998 dated April 29, 1998.
- 10.8 Fourth Amendment to Lease Agreement between Registrant and Principal Mutual Life Insurance Company, Inc. for office/warehouse space. Incorporated by reference to Exhibit 10.22 to the Company's Form 10-Q for the second quarter ending June 30, 1998 dated April 29, 1998.
- 10.9 Fifth Amendment to Lease Agreement between Registrant and Principal Mutual Life Insurance Company, Inc. for office/warehouse space. Incorporated by reference to Exhibit 10.9 to the Company's Form 10-Q for the second quarter ending June 30, 1999 dated August 12, 1999.
- 10.10 Employment Agreement dated December 27, 1999 between the Registrant and Charles E. Bugg, Ph.D.
- 10.11 Employment Agreement dated December 18, 1996 between the Registrant and J. Claude Bennett. Incorporated by reference to Exhibit 10.12 to the Company's Form 10-K for the year ended December 31, 1996 dated March 28, 1997.
- 10.12# 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).
- 10.13 Employee Stock Purchase Plan. Incorporated by reference to Exhibit 99.4 to the Company's Form S-8 Registration Statement (Registration No. 33-95062).
- 10.14 Form of Stock Purchase Agreement dated May 1995 between Registrant and various parties to purchase 1,570,000 shares of common stock. Incorporated by reference to Exhibit 10.22 to the Company's Form 10-Q for the second quarter ending June 30, 1995 dated August 11, 1995.
- 10.15 Form of Registration Rights Agreement dated May 1995 between Registrant and various parties. Incorporated by reference to Exhibit 10.23 to the Company's Form 10-Q for the second quarter ending June 30, 1995 dated August 11, 1995.
- 10.16 Form of Stock Purchase Agreement dated March 22, 1996 among Registrant and certain investors to purchase 1,000,000 shares of common stock. Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K dated March 22, 1996.
- 10.17 Form of Registration Rights Agreement dated March 22, 1996 among Registrant and certain investors. Incorporated by reference to Exhibit 10.2 to the Company's Form 8-K dated March 22, 1996.
- 10.18# License Agreement, dated May 31, 1996, between Registrant and Torii Pharmaceutical Co., Ltd. ("Torii"). Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K/A dated May 3, 1996 and filed August 2, 1996.
- 10.19# Stock Purchase Agreement, dated May 31, 1996, between Registrant and Torii. Incorporated by reference to Exhibit 10.2 to the Company's Form 8-K/A dated May 3, 1996 and filed August 2, 1996.
- 10.20# License Agreement dated as of September 14, 1998 between Registrant and The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil Powered By: EDGAR ONLINE 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.



10.21 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.

10.22 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.

23.1 Consent of Independent Auditors.

27.1 Financial Data Schedule.

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# Confidential treatment granted.

## 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 24th day of March, 2000.

### BIOCRIST 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 24th, 2000:

<i>Signature</i>	<i>Title(s)</i>
/s/Charles E. Bugg ----- (Charles E. Bugg, Ph.D.)	Chairman, Chief Executive Officer and Director
/s/J. Claude Bennett Officer ----- (J. Claude Bennett, M.D.)	President, Chief Operating and Director Executive Vice President, Secretary, Chief
/s/John A. Montgomery ----- (John A. Montgomery, Ph.D.)	Scientific Officer and Director
/s/W. Randall Pittman (Principal ----- (W. Randall Pittman)	Chief Financial Officer Financial and Accounting Officer)
/s/ William W. Featheringill ----- (William W. Featheringill)	Director
/s/Edwin A. Gee ----- (Edwin A. Gee, Ph.D.)	Director
-----	Director

(Zola P. Horovitz, Ph.D.)

**Director**

(William M. Spencer, III)

*/s/Joseph H. Sherrill, Jr.*  
*Director*

-----  
*(Joseph H. Sherrill, Jr.)*

*/s/Randolph C. Steer*  
*Director*

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*(Randolph C. Steer, M.D., Ph.D.)*



## INDEX TO EXHIBITS

Page Number	Description	
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.	
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. Incorporated by reference to Exhibit 99.1 to the Company's Form S-8 Registration Statement (Registration No. 333-30751).	
10.2	Amendment No. 1 to the 1991 Stock Option Plan, as amended and restated. Incorporated by reference to Exhibit 10.2 to the Company's Form 10-Q for the second quarter ending June 30, 1999 dated August 12, 1999.	
10.3	Form of Notice of Stock Option Grant and Stock Option Agreement. Incorporated by reference to Exhibit 99.2 and 99.3 to the Company's Form S-8 Registration Statement (Registration No. 33-95062).	
10.4	Warehouse Lease dated January 17, 1992 between Principal Mutual Life Insurance Company and the Registrant. Incorporated by reference to Exhibit 10.21 to the Company's Form S-1 Registration Statement (Registration No. 33-73868).	
10.5	First Amendment to Lease Agreement between Registrant and Principal Mutual Life Insurance Company, Inc. for office/warehouse space. Incorporated by reference to Exhibit 10.21 to the Company's Form 10-K for the year ending December 31, 1994 dated March 28, 1995.	
10.6	Second Amendment to Lease Agreement between Registrant and Principal Mutual Life Insurance Company, Inc. for office/warehouse space. Incorporated by reference to Exhibit 10.24 to the Company's Form 10-Q for the first quarter ending March 31, 1997 dated May 12, 1997.	
10.7	Third Amendment to Lease Agreement between Registrant and Principal Mutual Life Insurance Company, Inc. for office/warehouse space. Incorporated by reference to Exhibit 10.24 to the Company's Form 10-Q for the first quarter ending March 31, 1998 dated April 29, 1998.	
10.8	Fourth Amendment to Lease Agreement between Registrant and Principal Mutual Life Insurance Company, Inc. for office/warehouse space. Incorporated by reference to Exhibit 10.22 to the Company's Form 10-Q for the second quarter ending June 30, 1998 dated April 29, 1998.	
10.9	Fifth Amendment to Lease Agreement between Registrant and Principal Mutual Life Insurance Company, Inc. for office/warehouse space. Incorporated by reference to Exhibit 10.9 to the Company's Form 10-Q for the second quarter ending June 30, 1999 dated August 12, 1999.	
10.10	Employment Agreement dated December 27, 1999 between the Registrant and Charles E. Bugg, Ph.D.	48
10.11	Employment Agreement dated December 18, 1996 between the Registrant and J. Claude Bennett. Incorporated by reference to Exhibit 10.12 to the Company's Form 10-K for the year ended December 31, 1996 dated March 28, 1997.	
10.12#	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).	



- 10.13 Employee Stock Purchase Plan. Incorporated by reference to Exhibit 99.4 to the Company's Form S-8 Registration Statement (Registration No. 33-95062).
  - 10.14 Form of Stock Purchase Agreement dated May 1995 between Registrant and various parties to purchase 1,570,000 shares of common stock. Incorporated by reference to Exhibit 10.22 to the Company's Form 10-Q for the second quarter ending June 30, 1995 dated August 11, 1995.
  - 10.15 Form of Registration Rights Agreement dated May 1995 between Registrant and various parties. Incorporated by reference to Exhibit 10.23 to the Company's Form 10-Q for the second quarter ending June 30, 1995 dated August 11, 1995.
  - 10.16 Form of Stock Purchase Agreement dated March 22, 1996 among Registrant and certain investors to purchase 1,000,000 shares of common stock. Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K dated March 22, 1996.
  - 10.17 Form of Registration Rights Agreement dated March 22, 1996 among Registrant and certain investors. Incorporated by reference to Exhibit 10.2 to the Company's Form 8-K dated March 22, 1996.
  - 10.18# License Agreement, dated May 31, 1996, between Registrant and Torii Pharmaceutical Co., Ltd. ("Torii"). Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K/A dated May 3, 1996 and filed August 2, 1996.
  - 10.19# Stock Purchase Agreement, dated May 31, 1996, between Registrant and Torii. Incorporated by reference to Exhibit 10.2 to the Company's Form 8-K/A dated May 3, 1996 and filed August 2, 1996.
  - 10.20# 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.
  - 10.21 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.
  - 10.22 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.
  - 23.1 Consent of Independent Auditors.
  - 53 27.1 Financial Data Schedule.
  - 54
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# Confidential treatment granted.

## EXHIBIT 10.10

December 27, 1999

Dr. Charles E. Bugg  
Chairman and CEO  
BioCryst Pharmaceuticals, Inc.  
2190 Parkway Lake Drive  
Birmingham, Alabama 35244

Dear Dr. Bugg:

This letter agreement (the "Agreement") will serve to confirm our agreement with respect to the terms and conditions of the employment of Dr. Charles E. Bugg (the "Employee") by BioCryst Pharmaceuticals, Inc., a Delaware corporation ("BioCryst"), after December 31, 1999.

The terms and conditions of such employment are as follows:

1. Term of Employment. Subject to the terms and conditions of this Agreement, BioCryst hereby employs Employee, effective January 1, 2000, as Chairman of the Board and Chief Executive Officer of BioCryst, and Employee hereby accepts such employment. In addition, during the terms of this Agreement, BioCryst shall use its best efforts to provide that the Employee shall be elected as a member of the Board of Directors of BioCryst each year. BioCryst acknowledges and agrees that after December 31, 1999 Employee may also hold positions at the University of Alabama at Birmingham as Professor Emeritus of Biochemistry, Adjunct Senior Scientist in the Comprehensive Cancer Center, Adjunct Senior Scientist in the Center for Macromolecular Crystallography, and such other appointments that might be offered to the Employee from time to time, and the Employee will be permitted to devote up to ten percent (10%) of his time to such activities and to research and other activities at the University of Alabama at Birmingham, if the Employee desires to participate in such activities. Otherwise, after December 31, 1999 the Employee shall devote his full business time and energies to BioCryst. Except as provided in this paragraph 1, the Employee shall not, during the term of his employment, engage in any other business activity that would interfere with, or prevent him from carrying out, his duties and responsibilities under this Agreement. BioCryst hereby agrees and acknowledges that any compensation which the Employee receives from participation in such allowable activities shall be outside the scope of this Agreement and in addition to any compensation received hereunder. The term of employment of Employee under this Agreement shall commence as of January 1, 2000 and shall terminate on December 31, 2002, unless earlier terminated in accordance with the provisions of paragraph 3 hereof.

2. Basic Full-Time Compensation and Benefits.

(a) As basic yearly compensation for services rendered under this Agreement for services rendered under paragraph 1 of this Agreement, Employee shall be entitled to receive from BioCryst, for the term of his full-time employment under this Agreement, an aggregate salary of \$355,465 per year which remuneration shall be payable in equal monthly installments of \$29,602.08 on the first business day of each month during the term of this Agreement, beginning on January 1, 2000. This salary will be reviewed annually by the Board of Directors and may be raised at the discretion of the Board.

(b) In addition to the basic compensation set forth in (a) above, Employee shall be entitled to receive such other benefits and perquisites provided to other executive officers of BioCryst which benefits may include, without limitation, reasonable vacation, sick leave, medical benefits, life insurance, and participation in profit sharing or retirement plans.

(c) In addition to the compensation set forth in paragraphs 2(a) and

(b) above, the Board of Directors of BioCryst may from time to time, in its discretion, also grant such other cash or stock bonuses to the Employee either as an award or as an incentive as it shall deem desirable or appropriate.

### 3. Stock Options.

(a) BioCryst hereby agrees that it will grant a stock option to the Employee on or before December 31 of each year during the term of this Agreement, beginning with the year 2000, to purchase at least 25,000 shares of Common Stock of BioCryst, par value \$0.01 per share (the "Common Stock"), from the authorized and unissued stock or treasury stock of BioCryst, based on the performance of the Employee. The Board of Directors of BioCryst shall determine, in its sole discretion, based upon the performance of the Employee and the results of operations of BioCryst for the immediately preceding twelve (12) months, the number of shares which may be purchased pursuant to each such option, provided the number of shares shall not in any case be less than 25,000. In addition, BioCryst shall also grant to the Employee an option to purchase 100,000 shares of BioCryst Common Stock upon the occurrence of each of the following:

(i) submission by BioCryst to the United States Food and Drug Administration (the "FDA") of any new drug application;

(ii) submission by any licensee of BioCryst to the FDA of any new drug application utilizing a product or process licensed by the licensee from BioCryst;

(iii) final approval of each such new drug application of either BioCryst or such licensee by the FDA.

The exercise price per share for each share of BioCryst Common Stock subject to each such option shall be the fair market value thereof on the date such option is granted.

(b) The parties intend for the options granted pursuant to this Agreement (the "Options") to qualify as "incentive stock options," as that term is defined in Section 422 of the Internal Revenue Code of 1986, as amended ("Section 422"). The parties understand that the portion of any Option, together with the portion of any other incentive stock option granted by BioCryst and its parent and subsidiary corporations, if any, which may become exercisable in any year in excess of an aggregate of \$100,000 fair market value, determined as of the date such Option or other option, as the case may be, was granted, may not be treated as an incentive stock option under Section 422. The Options may be exercised and the Common Stock may be purchased by the Employee as a result of such exercise only within the periods and to the extent hereinafter set forth.

(c) Each Option shall be 25% exercisable one year after the date it was granted, and the remaining seventy-five percent (75%) shall vest and become exercisable at the rate of 1/48th per month, commencing with the thirteenth (13th) month after the date such Option was granted, and continuing to vest for the succeeding months until fully vested and exercisable. Notwithstanding the foregoing, in the event of a Change in Control or Structure, as defined below, or as set forth in subparagraphs

(d) or (e) below, the entire amount of each Option shall become immediately exercisable.

(d) If the Employee suffers a period of permanent disability, as defined in paragraph 4(b) below, the entire amount of each Option may be exercised at any time after termination for such disability and before the earlier of twenty-four (24) months or the expiration date of the Option.

(e) In the event of the death of the Employee, the executor or administrator of the estate of the Employee, or other reliable transferee, shall have the right to exercise each Option, in its entirety, within the earlier of twenty-four (24) months after the Employee's death or before the original expiration of the Option. Except as provided in this subparagraph (e), the Employee shall not have the right to transfer any Option.

(f) Subject to paragraphs 3(c), (d), and (e) above, each Option may, in the Employee's sole discretion, be exercised in full at one time as to the total number of shares of Common Stock then exercisable, or in part from time to time as to a specific number of shares of Common Stock then exercisable. A partial exercise of an Option will not affect the exercisability of the remainder of the Option.

(g) In no event shall the period for exercising an Option exceed ten (10) years from the date such Option is granted.

(h) For purposes of this Agreement, the term "Change of Control or Structure" shall mean:

(i) The acquisition by any person, entity or "group," within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934 (the "Exchange Act") of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of more than fifty percent (50%) of the then outstanding shares of Common Stock at the time of such event or the combined voting power of BioCryst's then outstanding voting securities generally entitled to vote in the election of directors, or

(ii) any merger, consolidation or business combination of BioCryst with or into any other entity, or

(iii) any transaction effected by a sale of substantially all the assets of BioCryst.

(i) In the event the employment of the Employee is terminated for any reason other than as set forth in subparagraph (d) or (e) above, the Employee may, within three (3) months following the date of such termination, exercise each Option to the full extent that they were exercisable immediately prior to the date of such termination, subject, however, to the limitation set forth in subparagraph (g) above.

(j) All numbers of shares set forth above or subject to any Option and all option prices, shall be subject to appropriate anti-dilution adjustment to take account of stock splits, stock dividends, merger, consolidation, reclassification or the like subsequent to the date hereof.

4. Termination. Notwithstanding the provisions of paragraph 1 hereof, the employment of the Employee under this Agreement may be terminated in the following circumstances:

(a) BioCryst may terminate the employment of Employee hereunder immediately for "Cause" and without payment. "Cause" for termination of Employee's employment hereunder shall exist if Employee

(i) shall confess to committing or shall be convicted of any felony or any crime involving moral turpitude, or

(ii) shall have engaged in gross and willful misconduct which is materially injurious to the business of BioCryst.

(b) BioCryst may terminate the employment of the Employee hereunder upon thirty (30) days written notice if the Employee shall have suffered a period of permanent disability, which shall for purposes of this Agreement be defined as the inability of Employee to perform his duties hereunder by reason of physical or mental incapacity for ninety (90) days, whether consecutive or not, during any consecutive twelve (12) month period.

Upon such termination of employment, all rights of Employee to receive any future payments under paragraph 2 above shall cease.

## 5. Non-Competition.

(a) Non-Competition Agreement. The Employee agrees that for one (1) year following the termination of this Employment Agreement by reason of the voluntary termination by the Employee, without cause on the part of BioCryst, the Employee shall not become the Chief Executive Officer or become a key executive of another for-profit business enterprise whose activities are at such time directly competitive with BioCryst.

(b) Equitable Remedies. Employee acknowledges and recognizes that a violation of this paragraph by Employee may cause irreparable and substantial damage and harm to BioCryst or its affiliates, could constitute a failure of consideration, and that money damages will not provide a full remedy for BioCryst for such violations. Employee agrees that in the event of his breach of this paragraph, BioCryst will be entitled, if it so elects, to institute and prosecute proceedings at law or in equity to obtain damages with respect to such breach, to enforce the specific performance of this paragraph by Employee, and to enjoin Employee from engaging in any activity in violation hereof.

## 6. Miscellaneous.

(a) Entire Agreement. This Agreement, including the exhibits hereto, constitutes the entire agreement between the parties relating to the employment of the Employee by BioCryst and there are no terms relating to such employment other than those contained in this Agreement. No modification or variation hereof shall be deemed valid unless in writing and signed by the parties hereto. No waiver by either party of any provision or condition of this Agreement shall be deemed a waiver of similar or dissimilar provisions or conditions at any time.

(b) Assignability. This Agreement may not be assigned without prior written consent of the parties hereto. To the extent allowable pursuant to this Agreement, this Agreement shall be binding upon and shall inure to the benefit of each of the parties hereto and their respective executors, administrators, personal representatives, heirs, successors and assigns.

(c) Notices. Any notice or other communication given or rendered hereunder by any party hereto shall be in writing and delivered personally or sent by registered or certified mail, postage prepaid, at the respective addresses of the parties hereto as set forth below.

(d) Captions. The section headings contained herein are inserted only as a matter of convenience and reference and in no way define, limit or describe the scope of this Agreement or the intent of any provision hereof.

(e) Taxes. All amounts to be paid to Employee hereunder are in the nature of compensation for Employee's employment by BioCryst, and shall be subject to withholding, income, occupation and payroll taxes and other charges applicable to such compensation.

(f) Governing Law. This Agreement is made and shall be governed by and construed in accordance with the laws of the State of Alabama without respect to its conflicts of law principles.

(g) Date. This Agreement is dated as of December 27, 1999.



If the foregoing correctly sets forth our understanding, please signify your acceptance of such terms by executing this Agreement, thereby signifying your assent, as indicated below.

Yours very truly,

**BIOCRIST PHARMACEUTICALS, INC.**

By: /s/ William W. Featheringill

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Its: Chairman, Compensation Committee

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Address:

2190 Parkway Lake Drive

Birmingham, Alabama 35244

AGREED AND ACCEPTED, as of this 27th day of December \_\_\_\_\_, 1999.

/s/ Charles E. Bugg

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Charles E. Bugg

**Address:**

4370 Cliff Road  
Birmingham, Alabama 35222

**EXHIBIT 23.1**

**CONSENT OF INDEPENDENT AUDITORS**

We consent to the incorporation by reference in the Registration Statements (Forms S-8 No. 33-81110, 33-95062 and 333-30751) pertaining to the BioCryst Pharmaceuticals, Inc. 1991 Stock Option Plan of our report dated January 21, 2000, with respect to the financial statements of BioCryst Pharmaceuticals, Inc. included in the Annual Report (Form 10-K) for the year ended December 31, 1999.

*LLP*

*/s/ Ernst & Young*

*Birmingham, Alabama  
March 23, 2000*

**ARTICLE 5**

This schedule contains summary financial information extracted from the BioCryst Pharmaceuticals, Inc. Financial Statements, and is qualified in its entirety by reference to such financial statements.

PERIOD TYPE	YEAR
FISCAL YEAR END	Dec 31 1999
PERIOD END	Dec 31 1999
CASH	8,631,447
SECURITIES	61,416,044
RECEIVABLES	0
ALLOWANCES	0
INVENTORY	0
CURRENT ASSETS	24,553,652
PP&E	3,678,368
DEPRECIATION	1,897,468
TOTAL ASSETS	73,386,896
CURRENT LIABILITIES	1,676,527
BONDS	0
PREFERRED MANDATORY	0
PREFERRED	0
COMMON	172,639
OTHER SE	71,230,834
TOTAL LIABILITY AND EQUITY	71,403,473
SALES	0
TOTAL REVENUES	5,328,725
CGS	0
TOTAL COSTS	0
OTHER EXPENSES	10,621,356
LOSS PROVISION	0
INTEREST EXPENSE	5,009
INCOME PRETAX	(5,297,640)
INCOME TAX	0
INCOME CONTINUING	0
DISCONTINUED	0
EXTRAORDINARY	0
CHANGES	0
NET INCOME	(5,297,640)
EPS BASIC	(.34)
EPS DILUTED	(.34)

# End of Filing