

REGISTRATION NO. 333-87669

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

AMENDMENT NO. 2
TO

FORM S-3

REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

BIOCRYST PHARMACEUTICALS, INC.

(Exact name of Registrant as specified in its Charter)

DELAWARE
(State or other jurisdiction of
incorporation or organization)

62-1413174
(I.R.S. Employer
Identification Number)

2190 PARKWAY LAKE DRIVE, BIRMINGHAM, ALABAMA 35244
(205) 444-4600
(Address, including zip code, and telephone number,
including area code, of Registrant's principal executive offices)

CHARLES E. BUGG, PH.D.
CHAIRMAN AND CHIEF EXECUTIVE OFFICER
BIOCRYST PHARMACEUTICALS, INC.
2190 PARKWAY LAKE DRIVE
BIRMINGHAM, ALABAMA 35244
(205) 444-4600
(Name, address, including zip code, and telephone number,
including area code, of agent for service of process)

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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: As soon as practicable on or after this Registration Statement is declared effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. / /

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. / /

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. / /

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. / /

If delivery of the prospectus is expected to be made pursuant to Rule 434,
please check the following box. / /

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR
DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL
FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION
STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF
THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME
EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING
PURSUANT TO SECTION 8(A), MAY DETERMINE.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED OCTOBER 22, 1999

P R O S P E C T U S

2,000,000 SHARES

[LOGO]

COMMON STOCK
\$ PER SHARE

We are selling 2,000,000 shares of our common stock. We have granted the underwriters a 30-day option to purchase up to an additional 300,000 shares to cover over-allotments, if any.

Our common stock is quoted on the Nasdaq National Market under the symbol "BCRX." The last reported sale price of our common stock on the Nasdaq National Market on October 8, 1999 was \$ per share.

INVESTING IN OUR COMMON STOCK INVOLVES CERTAIN RISKS. SEE "RISK FACTORS" BEGINNING ON PAGE 6.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	PER SHARE	TOTAL
	-----	-----
Public Offering Price	\$	\$
Underwriting Discount	\$	\$
Proceeds to BioCryst (before expenses)	\$	\$

The underwriters expect to deliver the shares to purchasers on or about , 1999.

SALOMON SMITH BARNEY

HAMBRECHT & QUIST

RAYMOND JAMES & ASSOCIATES, INC.

, 1999

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PROSPECTUS SUMMARY

THIS SUMMARY HIGHLIGHTS INFORMATION CONTAINED ELSEWHERE IN THIS PROSPECTUS. YOU SHOULD READ THIS ENTIRE PROSPECTUS CAREFULLY, INCLUDING THE "RISK FACTORS" SECTION. IN ADDITION, WE INCORPORATE BY REFERENCE IMPORTANT BUSINESS AND FINANCIAL INFORMATION IN THIS PROSPECTUS.

OUR COMPANY

BioCryst Pharmaceuticals, Inc. is a biotechnology company focused on the development of pharmaceuticals for the treatment of infectious, T-cell related and cardiovascular diseases and disorders. Our most advanced drug candidate, BCX-1812, is designed to treat and prevent influenza. We licensed this drug candidate to The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil Pharmaceutical, Inc., both Johnson & Johnson companies.

We have two other drug development programs underway. The first program is our purine nucleoside phosphorylase, or PNP, inhibitor program which we are pursuing for the treatment of T-cell cancers. We are also developing a class of compounds that may prevent or stop activation of complement proteins and may therefore help in the treatment of cardiovascular diseases and disorders.

An important element of our business strategy is to control costs and overhead through contracting and partnering with third parties. We focus on the discovery and early-stage development of our drug candidates and seek to establish collaborative partnerships with pharmaceutical companies for the later-stage development and commercialization of these compounds. This strategy is designed to control our expenses, minimize risks and allow us to have a greater number of attractive drug candidates progress to advanced-stage clinical trials.

OUR FLU DRUG CANDIDATE (BCX-1812)

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, it 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 and accounts 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. The annual cost to the U.S. economy associated with influenza epidemics was estimated to be in excess of \$12 billion, according to a 1994 article in THE NEW ENGLAND JOURNAL OF MEDICINE.

In collaboration with scientists from The University of Alabama at Birmingham, we developed BCX-1812, our most advanced drug candidate. BCX-1812 is designed to inhibit the influenza neuraminidase enzyme. This enzyme allows the flu virus to replicate and spread throughout the body. By inhibiting this enzyme, we believe that BCX-1812 may be effective in the treatment and prevention of the flu.

Our preclinical studies demonstrated that BCX-1812 has the following benefits:

- excellent safety profile;
- inhibition of both influenza A and B;
- effective when taken orally;
- probable once-a-day dosage; and
- can be made into a liquid form, allowing for use by the elderly and young children.

In September 1998, we entered into an exclusive worldwide license agreement with The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil, both Johnson & Johnson companies. These Johnson & Johnson companies have sole responsibility for the development, manufacture, marketing, sales and distribution of BCX-1812. 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 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 any product sales.

Since the collaboration was established, BCX-1812 moved through Phase I clinical trials and a Phase II clinical study by August 1999. We recently announced preliminary results from a Phase II placebo-controlled, randomized study conducted by The R.W. Johnson Pharmaceutical Research Institute for the treatment of healthy volunteers infected with a strain of influenza A. The R.W. Johnson Pharmaceutical Research Institute 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. They also have advised us that the planning of the Phase III clinical trials for the 1999/2000 influenza season is underway.

Our principal offices are located at 2190 Parkway Lake Drive, Birmingham, Alabama 35244, and our telephone number is (205) 444-4600.

THE OFFERING

Common stock offered.....	2,000,000 shares
Common stock to be outstanding after the offering.....	17,238,672 shares
Use of proceeds.....	For research and development activities, preclinical studies and clinical trials, working capital and general corporate purposes.

Unless we specifically state otherwise, the information in this prospectus does not take into account the issuance of up to 300,000 shares of common stock which the underwriters have the option to purchase solely to cover over-allotments. If the underwriters exercise their over-allotment option in full, 17,538,672 shares of common stock will be outstanding after the offering.

The number of shares of common stock to be outstanding immediately after the offering is based upon shares outstanding as of October 8, 1999 and does not take into account 2,255,736 shares of common stock issuable upon exercise of options outstanding at a weighted average exercise price of \$7.52 per share and 595,707 shares reserved under our existing stock option plan and employee stock purchase plan.

SUMMARY FINANCIAL DATA

	YEARS ENDED DECEMBER 31,					SIX MONTHS ENDED JUNE 30,	
	1994	1995	1996	1997	1998	1998	1999
(IN THOUSANDS, EXCEPT PER SHARE DATA)							
STATEMENT OF OPERATIONS DATA:							
Revenues:							
Collaborative and other research and development.....	\$ 269	\$ 223	\$ 1,558	\$ 1,000	\$ 6,371	\$ --	\$ 2,408
Interest and other.....	465	662	1,094	1,692	1,255	671	633
Total revenues.....	734	885	2,652	2,692	7,626	671	3,041
Expenses:							
Research and development.....	5,552	7,107	7,586	10,577	9,291	5,353	4,006
General and administrative.....	1,904	2,210	2,664	2,682	3,105	1,295	1,683
Interest.....	216	144	100	52	15	10	3
Total expenses.....	7,672	9,461	10,350	13,311	12,411	6,658	5,692
Net loss.....	\$ (6,938)	\$ (8,576)	\$ (7,698)	\$ (10,619)	\$ (4,785)	\$ (5,987)	\$ (2,651)
Net loss per share.....	\$ (1.02)	\$ (0.96)	\$ (0.69)	\$ (0.77)	\$ (0.34)	\$ (0.43)	\$ (0.18)
Weighted average shares outstanding....	6,787	8,905	11,171	13,780	14,120	13,926	14,981

The as-adjusted information that follows gives effect to this offering and assumes no exercise of the underwriters' over-allotment option.

	JUNE 30, 1999	
	ACTUAL	AS ADJUSTED
(IN THOUSANDS)		
BALANCE SHEET DATA:		
Cash, cash equivalents and securities held-to-maturity.....	\$ 24,317	\$ 69,827
Total assets.....	26,546	72,056
Accumulated deficit.....	(55,821)	(55,821)
Total stockholders' equity.....	25,199	70,709

RISK FACTORS

AN INVESTMENT IN OUR COMMON STOCK INVOLVES SIGNIFICANT RISKS. YOU SHOULD CAREFULLY CONSIDER THE FOLLOWING RISKS BEFORE YOU DECIDE TO BUY OUR COMMON STOCK.

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 June 30, 1999, our accumulated deficit was approximately \$55.8 million. To become profitable, we must successfully develop drug candidates, enter into profitable agreements with collaborative partners and our drug candidates must receive regulatory approval. Our collaborative partners must then successfully manufacture and market our drug candidates. It will 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 such financing is not available on acceptable terms, or not available at all, we may not have enough capital to continue our current business strategy.

WE ARE DEPENDENT ON THE R.W. JOHNSON PHARMACEUTICAL RESEARCH INSTITUTE AND ORTHO-MCNEIL FOR SUBSTANTIALLY ALL OF OUR REVENUE

Approximately 79.2% of our revenues for the six months ended June 30, 1999 and approximately 83.5% of our revenues for the year ended December 31, 1998 resulted from our exclusive worldwide license agreement with The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil. These revenues represent approximately 45.0% of our total revenues since our inception in 1986. Any changes to this license agreement, including termination or failure to fulfill obligations, would materially and adversely affect our business, because most of our revenues are derived from this license agreement.

Under this agreement, they have the following rights that could delay or stop the development of our flu drug candidate:

- sole discretion on all elements of research and development of BCX-1812, including timing and design of further clinical trials;
- sole responsibility to initiate and complete clinical trials, interpret data, prepare and file a new drug application, receive the approval of the U.S. Food and Drug Administration, or FDA, or foreign regulatory agencies and commercialize BCX-1812;
- sole control over the amount of resources devoted to the research and development of BCX-1812; and
- the right to terminate or cancel the agreement, which may be done at any time on four months notice.

In addition, The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil have the right to subject us to penalties, including reducing their royalty payments or forcing us to assign all of our interest in joint inventions and patents to them if we breach this license agreement.

Physicians, patients, payors or the medical community in general may not accept or use our drug candidates even after regulatory approval has been obtained. If our drug candidates do not achieve significant market acceptance, we will not have enough revenues to become profitable.

THE SUCCESS OF OUR DRUG DEVELOPMENT PROGRAMS, FROM WHICH WE DERIVE SUBSTANTIALLY ALL OUR RECENT REVENUE, DEPENDS SOLELY UPON THIRD PARTIES FOR MANY OF THE CRITICAL STEPS IN THE DRUG DEVELOPMENT PROCESS

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

- discovery of enzyme targets;

- execution of preclinical studies and initial clinical trials for our compounds;

- design and execution of late-stage clinical trials for our drug candidates;

- development of our drug candidates;

- obtaining regulatory approval for our drug candidates;

- manufacturing of our drug candidates; and

- 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 were unable to license enzyme targets from academic institutions or other biotechnology companies on acceptable terms, our product development efforts would be hampered. 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 third parties for all of these steps so that we can focus exclusively on structure-based drug design, the key area of our expertise. This heavy reliance upon third parties for these critical functions presents several risks, including:

- these third-party contracts may expire or be unilaterally terminated, as was the case with our Torii Pharmaceutical Co., Ltd. contract;

- our collaborative partners may choose to pursue alternative technologies, including those of our competitors;

- we may have disputes with a partner that could lead to litigation or arbitration;

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

- our partners may not comply with applicable government regulatory requirements.

Any problems encountered with our third-party 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.

CLINICAL TRIALS ARE UNPREDICTABLE AND OUR FAILURE TO SUCCESSFULLY IMPLEMENT AND COMPLETE THEM WOULD HARM OUR BUSINESS BECAUSE SUCH FAILURE WOULD LEAD TO OUR DRUG CANDIDATES NOT BEING 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 collaborative partners must demonstrate through preclinical studies and clinical trials that each drug candidate is safe and effective. The clinical trial process is complex and uncertain. Positive results from preclinical studies and early clinical trials do not ensure positive results in pivotal clinical trials. Many companies in our industry, including us, have suffered significant setbacks in pivotal clinical trials, even

after earlier clinical trials showed 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, 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 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 clinical trials are successfully completed for our product candidates, our third-party licensees might not file the required regulatory submissions in a timely manner and may not receive regulatory approval for the drug candidate.

Our drug candidate, BCX-1812, has been licensed to Ortho-McNeil and to The R.W. Johnson Pharmaceutical Research Institute, which is in the process of conducting clinical trials. However, the FDA may not accept The R.W. Johnson Pharmaceutical Research Institute's clinical protocols, the Phase III clinical trials may not begin in 1999, or at all, and any Phase III clinical trials may not be successful. Even if The R.W. Johnson Pharmaceutical Research Institute 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, BCX-1812. If The R.W. Johnson Pharmaceutical Research Institute is unable to begin clinical trials as planned, complete the clinical trials or demonstrate the safety and efficacy of our compounds, our business will be harmed because a significant amount of our future revenues are dependent upon the success of BCX-1812. Even if the results of The R.W. Johnson Pharmaceutical Research Institute's trials are positive, products are not likely to be commercially available for several years, if at all.

IF WE OR OUR COLLABORATIVE PARTNERS DO NOT OBTAIN AND MAINTAIN GOVERNMENTAL APPROVALS FOR OUR PRODUCTS UNDER DEVELOPMENT, WE OR OUR COLLABORATIVE 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 collaborative partners must obtain regulatory approval before marketing or selling our future drug products. In the United States, we or our collaborative 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. None of our drug products has received regulatory approval to be commercially marketed and sold. If we or our collaborative partners 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 regulatory approval is delayed, our management's credibility, our company's value and our operating results may be adversely affected. Even if regulatory approval of a drug candidate is granted, the approval may limit the indicated uses for which a drug candidate may be marketed 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 are damaged.

If we get approval to market our potential products, whether in the United States or internationally, we will continue to be subject to extensive regulatory requirements. These requirements are wide ranging and govern, among other things:

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

Our failure to comply with existing or future regulatory requirements, or our loss of, or changes to, previously obtained approvals, could have a material adverse effect on our business because we will not receive royalty revenues if our products are not approved 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. The FDA inspected us and issued to us Lists of Inspectional Observations, Form FDA 483, that cited our failure to follow good clinical practices. A Form FDA 483 was also issued to a principal investigator at a clinical trial site, and the FDA notified us that they would not accept work performed by this investigator without further validation. The FDA will not accept work performed by this investigator for oral BCX-34 in any new drug application to support the effectiveness of oral BCX-34. 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, even if approved for sale by the FDA or foreign regulatory agencies, may not gain the market acceptance required for us to be profitable. The degree of market acceptance of any drug candidates that we or our partners develop will depend on a number of factors, including:

- establishment and demonstration of the clinical efficacy and safety of our drug candidates;
- cost-effectiveness of our drug candidates;
- their effectiveness relative to alternative treatment methods, such as the efficacy, cost and ease of use of our flu drug candidate over other products, including vaccines, existing drugs such as amantadine and rimantadine, Hoffmann-La Roche's and Glaxo Wellcome's influenza neuraminidase inhibitors and over-the-counter products;
- reimbursement policies of government and third-party payors; and
- 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 regulatory approval has been obtained. If our drug candidates do not achieve significant market acceptance, we will not have enough revenues to become profitable.

COMPETITIVE PRODUCTS FROM OTHER COMPANIES MAY RENDER SOME OR ALL OF OUR PRODUCT CANDIDATES NONCOMPETITIVE OR OBSOLETE

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, BCX-1812 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 drugs amantadine and rimantadine and over-the-counter products, and with additional products that may beat BCX-1812 to the market. If approved, BCX-1812, will likely be the third neuraminidase inhibitor to the market, because Glaxo-Wellcome plc has received FDA approval for marketing a neuraminidase inhibitor product in the U.S. and has received approval for marketing this product in several other countries, and because Hoffman-La Roche is also developing a neuraminidase inhibitor product that is currently under FDA review. Both Glaxo-Wellcome and Hoffmann-La Roche, the companies responsible for the development and marketing of the two neuraminidase inhibitors that will reach the market before BCX-1812, are large multinational pharmaceutical companies that have significant financial, technical and human resources and could therefore establish brand recognition and loyalty with consumers before BCX-1812 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.

WE MAY FAIL TO ADEQUATELY PROTECT OR ENFORCE OUR INTELLECTUAL PROPERTY RIGHTS OR SECURE RIGHTS TO THIRD-PARTY PATENTS

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. To date, we have been issued nine U.S. patents for our various inventions. Additional patent applications and provisional patent applications have been filed with the U.S. Patent and Trademark Office. We have filed certain corresponding foreign patent applications and intend to file additional foreign and U.S. patent applications, as appropriate. We cannot assure you as to:

- the degree and range of protection any patents will afford against competitors with similar products;
- if and when patents will issue;
- whether or not others will obtain patents claiming aspects similar to those covered by our patent applications;
- whether or not others will design around our patents or obtain access to our know-how; or
- the extent to which we will be successful in avoiding any patents granted to others.

If certain patents issued to others are upheld or if certain patent applications filed by others issue and are upheld, we may be:

- required to obtain licenses or redesign our products or processes to avoid infringement;
- prevented from practicing the subject matter claimed in those patents; or
- required to pay damages.

Litigation or administrative proceedings, including proceedings before the U.S. Patent and Trademark Office, related to intellectual property rights could be brought against us or be initiated by us. 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 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 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 be materially adversely affected because our revenues depend upon our ability to license our technology and any such events would significantly impair the value of such a license.

WE ARE DEPENDENT ON OUR KEY PERSONNEL AND WILL NEED TO ATTRACT AND RETAIN ADDITIONAL KEY PERSONNEL IN THE FUTURE

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. If we are unable to attract and retain the required number of skilled and experienced management, operational and scientific personnel, our business will be harmed, because we rely upon such 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.

THE LACK OF REIMBURSEMENT FOR THE USE OF OUR PRODUCT CANDIDATES MAY LIMIT THEIR USE, WHICH WOULD REDUCE OUR POTENTIAL REVENUES

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 certain that our product candidates will be viewed as cost-effective, that reimbursement will be available to consumers or that such reimbursement will be sufficient to allow our product candidates to be marketed on a competitive basis. To the extent that changes in reimbursement policies, or attempts to contain costs in the health care industry, limit or restrict reimbursement for our product candidates, our business would be materially and adversely affected, because product sales would decline and we would receive less royalty revenue.

WE MAY FACE CLINICAL TRIAL LIABILITY CLAIMS RELATED TO THE USE OR MISUSE OF OUR COMPOUNDS IN CLINICAL TRIALS

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 such 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 such claims would strain our financial resources in addition to consuming the time and attention of our management.

IF OUR COMPUTER SYSTEMS FAIL, WE MAY BE HARMED MORE THAN OTHER COMPANIES

Our drug development activities depend on the security, integrity and performance of the computer systems supporting them. 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 our data to be inaccurately calculated or lost. 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 could be harmed if any system failure occurs.

IF, BECAUSE OF OUR USE OF HAZARDOUS MATERIALS, WE VIOLATE ANY ENVIRONMENTAL CONTROLS OR REGULATIONS THAT APPLY TO SUCH MATERIALS, WE MAY BE FORCED TO 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 such materials and certain waste products. Accidental contamination or injury from these materials could occur. In the event of such an accident, we could be held liable for any damages that result and any such liability 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

Prior to this offering, our directors, executive officers and certain principal stockholders and their affiliates, including Johnson & Johnson Development Corporation, own approximately 40.5% 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. Such concentration of ownership may have the effect of delaying, deferring or preventing 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 such shares without further vote or action by our stockholders. The rights of the holders of common stock will be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued in the future. The issuance of preferred stock could have the effect of making 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 certain 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.

INVESTORS IN THIS OFFERING WILL SUFFER IMMEDIATE AND SUBSTANTIAL DILUTION

You will incur immediate and substantial dilution of \$20.35 in the net tangible book value per share of the shares you purchase in this offering. To the extent outstanding options to purchase common stock are exercised, there will be further dilution. The net tangible book value per share of existing stockholders will increase by \$2.48 because of this offering.

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 has previously experienced significant fluctuations that often have not related to our financial results. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock:

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

IF WE EXPERIENCE ANY PROBLEMS WITH YEAR 2000 COMPLIANCE, OUR OPERATIONS MAY BE DISRUPTED

Beginning in the year 2000, the date fields coded in certain software products and computer systems will need to accept four digit entries in order to distinguish between years in the 1900s and years dated 2000 and higher (commonly known as the year 2000 problem). It is not clear what potential problems may arise as the biopharmaceutical industry, and other industries, try to resolve this year 2000 problem.

It is possible that our currently installed computer systems, software products or other business systems, or those of our suppliers or service providers, working either alone or in conjunction with other software or systems, will not accept input of, store, manipulate and output dates for the year 2000 or subsequent years without error or interruption. We attempted to review and resolve those aspects of the year 2000 problem that are within our direct control and adjust to or influence those aspects that are not within our direct control. We have completed our assessment of our systems and expect remediation and testing to be fully implemented by the end of 1999. Our potential drug candidates do not have any year 2000 exposure. Our major vendors and suppliers have been contacted with regard to their year 2000 compliance, and we will continue to monitor their compliance.

Some risks associated with the year 2000 problem are beyond our ability to control, including the extent to which our suppliers and service providers address the year 2000 problem. The failure by a third party to adequately address the year 2000 issue could have an adverse effect on their operations, which could have an adverse effect on us. We are assessing the possible effects on our operations of the possible failure of our key suppliers and providers, contractors and collaborators to identify and remedy potential year 2000 problems.

YOU SHOULD RELY ONLY ON THE INFORMATION CONTAINED IN THIS PROSPECTUS. WE HAVE NOT AUTHORIZED ANYONE TO PROVIDE YOU WITH DIFFERENT INFORMATION. WE ARE NOT MAKING AN OFFER OF THESE SECURITIES IN ANY STATE WHERE THE OFFER IS NOT PERMITTED. YOU SHOULD NOT ASSUME THAT THE INFORMATION PROVIDED BY THIS PROSPECTUS IS ACCURATE AS OF ANY DATE OTHER THAN THE DATE ON THE FRONT OF THIS PROSPECTUS.

INFORMATION REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. The forward-looking statements are principally contained in the sections on "Prospectus Summary," "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." These statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements include, but are not limited to:

- the progress of our product development programs, including The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil's progress with respect to our influenza neuraminidase inhibitors;
- developments with respect to clinical development of drug candidates, clinical trials and the regulatory approval process;
- our estimates regarding our capital requirements and our needs for additional financing;
- developments relating to our selection and in-licensing of targets; and
- our ability to attract development partners with acceptable development, regulatory and commercialization expertise.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential" and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss many of these risks in greater detail under the heading "Risk Factors." Also, these forward-looking statements represent our estimates and assumptions only as of the date of this prospectus.

You should read this prospectus and the documents that we incorporate by reference in this prospectus completely and with the understanding that our actual future results may be materially different from what we expect. We may not update these forward-looking statements, even though our situation may change in the future. We qualify all of our forward-looking statements by these cautionary statements.

USE OF PROCEEDS

We estimate that the net proceeds we will receive from the sale of 2,000,000 shares of common stock will be approximately \$45.5 million, or approximately \$52.4 million if the underwriters fully exercise their over-allotment option, after deducting the estimated underwriting discounts and offering expenses and assuming an offering price of \$24.50 per share. We expect to use the net proceeds of this offering as follows:

- to fund drug discovery and other research programs;
- to fund preclinical studies and clinical trials of our drug candidates;
- to provide working capital; and
- for general corporate purposes.

We have not determined the amount of net proceeds to be used for each of the specific purposes listed. Accordingly, we will have broad discretion to use the proceeds as we see fit.

Based upon the current status of our product development programs, we believe that the net proceeds from this offering, together with interest on those net proceeds, and our existing capital resources will satisfy our capital requirements through 2001.

Pending such uses, we intend to invest the net proceeds in interest-bearing, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the United States or its agencies.

MARKET PRICE OF COMMON STOCK

Our common stock began trading publicly on the Nasdaq National Market under the symbol "BCRX." We completed the initial public offering of our common stock on March 4, 1994. The following table shows the range of high and low sale prices per share of our common stock as reported by the Nasdaq National Market for the periods indicated.

	COMMON STOCK PRICE	
	HIGH	LOW
Year ended December 31, 1997		
First Quarter.....	\$ 17.00	\$ 11.50
Second Quarter.....	14.75	10.06
Third Quarter.....	13.75	4.25
Fourth Quarter.....	8.38	6.25
Year ended December 31, 1998		
First Quarter.....	9.50	6.88
Second Quarter.....	9.13	6.00
Third Quarter.....	8.00	6.00
Fourth Quarter.....	8.44	4.38
Year ended December 31, 1999		
First Quarter.....	11.00	6.38
Second Quarter.....	9.50	6.38
Third Quarter.....	35.31	8.38
Fourth Quarter (through October 8, 1999).....	25.00	23.38

On October 8, 1999, the last sale price of our common stock reported by the Nasdaq National Market was \$24.50 per share. As of August 1, 1999, there were 483 holders of record of our common stock.

DIVIDEND POLICY

We have not declared or paid cash dividends on our common stock in the past and do not intend to pay dividends on our common stock in the foreseeable future.

CAPITALIZATION

The following table shows our capitalization as of June 30, 1999 on an actual basis and as adjusted to reflect the sale of 2,000,000 shares of common stock in this offering, assuming an offering price of \$24.50 per share and after deducting the estimated underwriting discounts and offering expenses. This table should be read in conjunction with the financial statements and related notes incorporated in this prospectus by reference and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this prospectus.

	JUNE 30, 1999	
	ACTUAL	AS ADJUSTED
	(IN THOUSANDS, EXCEPT SHARE DATA)	
Capital lease obligations, less current portion.....	\$ 15	\$ 15
Stockholders' equity:		
Preferred stock, \$0.01 par value; 5,000,000 shares authorized; none issued and outstanding.....	--	--
Common stock, \$0.01 par value; 45,000,000 shares authorized; 14,987,634 issued and outstanding, and 16,987,634 shares issued and outstanding as adjusted for this offering.....	150	170
Additional paid-in capital.....	80,870	126,360
Accumulated deficit.....	(55,821)	(55,821)
Total stockholders' equity.....	25,199	70,709
Total capitalization.....	\$ 25,214	\$ 70,724

The above data excludes 2,507,501 shares of common stock issuable upon exercise of options outstanding as of June 30, 1999 at a weighted average exercise price of \$7.37 per share.

DILUTION

Our net tangible book value as of June 30, 1999 was approximately \$25.0 million, or \$1.67 per share. Net tangible book value per share represents the amount of our total tangible assets less total liabilities divided by the total number of shares of common stock outstanding. After giving effect to the sale by us of 2,000,000 shares of common stock offered by this prospectus at an assumed offering price of \$24.50 per share and after deducting estimated underwriting discounts and offering expenses, our net tangible book value at June 30, 1999 would have been approximately \$70.5 million, or \$4.15 per share. This represents an immediate increase in net tangible book value of \$2.48 per share to existing stockholders and an immediate dilution of \$20.35 per share to new investors in this offering, as illustrated by the following table:

Assumed public offering price per share.....		\$ 24.50
Net tangible book value per share before the offering.....	\$ 1.67	
Increase per share attributable to new investors.....	2.48	
Net tangible book value per share after the offering.....		4.15
Net tangible book value dilution per share to new investors.....		\$ 20.35

SELECTED FINANCIAL DATA

The following selected financial data should be read in conjunction with the financial statements and related notes, incorporated by reference in this prospectus, and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this prospectus. The selected historical financial data below as of and for each of the five years ended December 31, 1998 have been derived from our audited financial statements. Our selected historical financial data as of June 30, 1999 and for each of the six months ended June 30, 1998 and 1999 were derived from our unaudited condensed financial statements. We believe that the unaudited financial data fairly reflects our results of operations and financial condition for the respective periods.

	YEARS ENDED DECEMBER 31,					SIX MONTHS ENDED JUNE 30,	
	1994	1995	1996	1997	1998	1998	1999
(IN THOUSANDS, EXCEPT PER SHARE DATA)							
STATEMENT OF OPERATIONS DATA:							
Revenues:							
Collaborative and other research and development.....	\$ 269	\$ 223	\$ 1,558	\$ 1,000	\$ 6,371	\$ --	\$ 2,408
Interest and other.....	465	662	1,094	1,692	1,255	671	633
Total revenues.....	734	885	2,652	2,692	7,626	671	3,041
Expenses:							
Research and development.....	5,552	7,107	7,586	10,577	9,291	5,353	4,006
General and administrative.....	1,904	2,210	2,664	2,682	3,105	1,295	1,683
Interest.....	216	144	100	52	15	10	3
Total expenses.....	7,672	9,461	10,350	13,311	12,411	6,658	5,692
Net loss.....	\$ (6,938)	\$ (8,576)	\$ (7,698)	\$ (10,619)	\$ (4,785)	\$ (5,987)	\$ (2,651)
Net loss per share.....	\$ (1.02)	\$ (0.96)	\$ (0.69)	\$ (0.77)	\$ (0.34)	\$ (0.43)	\$ (0.18)
Weighted average shares outstanding.....	6,787	8,905	11,171	13,780	14,120	13,926	14,981

	DECEMBER 31,					JUNE 30,
	1994	1995	1996	1997	1998	1999
(IN THOUSANDS)						
BALANCE SHEET DATA:						
Cash, cash equivalents and securities held-to-maturity.....	\$ 10,873	\$ 11,414	\$ 35,785	\$ 24,643	\$ 27,012	\$ 24,317
Total assets.....	12,803	13,056	37,149	26,485	29,100	26,546
Accumulated deficit.....	(21,491)	(30,067)	(37,766)	(48,384)	(53,170)	(55,821)
Total stockholders' equity.....	11,176	11,326	35,403	25,285	27,682	25,199

MANAGEMENT'S DISCUSSION AND ANALYSIS OF
FINANCIAL CONDITION AND RESULTS OF OPERATIONS

YOU SHOULD READ THE FOLLOWING DISCUSSION AND ANALYSIS IN CONJUNCTION WITH OUR FINANCIAL STATEMENTS AND RELATED NOTES INCORPORATED IN THIS PROSPECTUS BY REFERENCE.

OVERVIEW

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

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

Our revenues have generally been limited to license fees, milestone payments, interest income, collaboration research, 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 will 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 June 30, 1999 was \$55.8 million. We will require substantial expenditures relating to the development of our current and future drug candidates. During the three years ended December 31, 1998, we spent 44.7% of our research and development expenses on contract research and development, including:

- payments to consultants;
- funding of research at academic institutions;
- large scale synthesis of compounds;
- preclinical studies;
- engaging investigators to conduct clinical trials;
- hiring contract research organizations to monitor and gather data on clinical trials; and
- using statisticians to evaluate the results of clinical trials.

The above expenditures for contract research and development for our current and future drug candidates will vary from quarter to quarter depending on the status of our research and development projects. 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.

RESULTS OF OPERATIONS

SIX MONTHS ENDED JUNE 30, 1999 AND 1998

Collaborative and other research and development revenue increased to \$2.4 million in the first six months of 1999. This increase is attributable to the \$2.0 million milestone payment received from Ortho-McNeil in June 1999 and approximately \$0.4 million of research and development work performed for The R.W. Johnson Pharmaceutical Research Institute. There was no such revenue in the first six months of 1998. Interest and other income declined 5.7% to \$633,000 in the first six months of 1999 from \$671,000 in the first six months of 1998. The decline in interest and other income is primarily due to a decline in interest rates.

Research and development expenses decreased 25.2% to \$4.0 million in the first six months of 1999 from \$5.4 million in the first six months of 1998. The decrease is primarily attributable to a decrease in costs associated with conducting clinical trials and a reduction in contracted research costs at The University of Alabama at Birmingham. These costs tend to fluctuate from period to period depending upon the status of our research projects and collaborative efforts.

General and administrative expenses increased 30.0% to \$1.7 million in the first six months of 1999 from \$1.3 million in the first six months of 1998. The increase is primarily the result of a royalty payment to The University of Alabama at Birmingham in connection with the milestone payment received from Ortho-McNeil, and increased legal expenses.

Interest expense decreased to \$2,776 in the first six months of 1999 from \$9,914 in the first six months of 1998. The decrease was primarily due to a decline in capitalized lease obligations resulting in lesser interest expense. We obtained most of our leases in connection with the move to our facilities in April 1992.

YEARS ENDED DECEMBER 31, 1998 AND 1997

Collaborative and other research and development revenue increased to \$6.4 million in 1998 from \$1.0 million in 1997, primarily due to the \$6.0 million in up-front fees received from Ortho-McNeil in 1998 for a license agreement for our influenza neuraminidase inhibitors compared to the \$1.0 million milestone payment received from Torii in 1997. Interest and other income decreased 25.9% to \$1.3 million in 1998 from \$1.7 million in 1997, primarily due to a decline in the weighted average investment for 1998.

Research and development expenses decreased 12.2% to \$9.3 million in 1998 from \$10.6 million in 1997. Such expenses vary from period to period based on the status of our projects. We completed two Phase III clinical trials in 1997. In 1998, we commenced two Phase I clinical trials for our complement inhibitor, continued our two Phase I/II clinical trials for an oral formulation of our purine nucleoside phosphorylase, or PNP, inhibitor and initiated preclinical studies for our influenza neuraminidase and complement inhibitors. Overall, the decline in costs associated with our PNP inhibitor project were partially offset by the increases in our complement inhibitor and influenza neuraminidase projects. As a result, there was a slight decrease in 1998 in the outside research and development efforts associated with our three primary research and development projects. We reduced some of our other discretionary costs, which were offset by one-time costs associated with signing an exclusive worldwide license agreement for our proprietary influenza neuraminidase inhibitors and certain related agreements in September 1998.

General and administrative expenses increased 15.8% to \$3.1 million in 1998 from \$2.7 million in 1997. The increase was primarily due to the fees and expenses incurred in connection with the license agreement and related agreements for our 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. We obtained most of our leases in connection with the move to our facilities in April 1992.

Collaborative and other research and development revenue decreased 35.8% to \$1.0 million in 1997 from \$1.6 million in 1996, primarily due to a \$1.0 million milestone payment received from Torii in 1997 compared to the \$1.5 million license fee received from Torii and a federal grant in 1996. Interest and other income increased 54.8% to \$1.7 million in 1997 from \$1.1 million in 1996, primarily due to interest earned on funds invested from our public offering in September 1996.

Research and development expenses increased 39.4% to \$10.6 million in 1997 from \$7.6 million in 1996. The increase was primarily attributable to costs associated with manufacturing compounds, clinical trials and preclinical studies and expenses associated with increased personnel. These costs tend to fluctuate from period to period depending upon the stage of development and the conduct of clinical trials.

General and administrative expenses increased 0.7% to \$2.7 million in 1997 from \$2.7 million in 1996. The increase was primarily attributable to increased personnel costs and the fact that 1996 expenses were reduced by the reversal of a liability recorded in 1995 for use taxes assessed that we successfully contested in 1996, and was partially offset by decreased fees and taxes on the Torii milestone in 1997 as compared to the fees and taxes on the Torii license in 1996 and decreased legal expenses in 1997.

Interest expense decreased 48.1% to \$51,880 in 1997 from \$100,031 in 1996. The decrease was primarily due to a decline in capitalized lease obligations and the current portion of long-term debt, resulting in lesser interest expense. We obtained most of our leases in connection with the move to our facilities in April 1992.

LIQUIDITY AND CAPITAL RESOURCES

Cash expenditures have exceeded revenues since our inception. Our operations have principally been funded through public offerings and private placements of equity and debt securities, equipment lease financing, facility leases, collaborative and other research and development agreements, licenses and options for licenses, research grants and interest income. In addition, we have attempted to contain costs and reduce cash flow requirements by renting scientific equipment and facilities, contracting with third parties to conduct certain research and development and using consultants. We expect to incur additional expenses, 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, 1998, our cash, cash equivalents and securities held-to-maturity were \$27.0 million, an increase of \$2.4 million from December 31, 1997, principally due to the \$6.0 million equity investment in us in connection with the influenza neuraminidase license which offset the cash used in operations. At June 30, 1999, our cash, cash equivalents and securities held-to-maturity were \$24.3 million, a decrease of approximately \$2.7 million from December 31, 1998, principally due to the cash used by operations for the six months ended June 30, 1999.

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 \$21,405 and escalating annually to a minimum of \$24,814 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, 1998, we had long-term capital lease and operating lease obligations which provide for aggregate minimum payments of \$280,254 in 1999, \$288,128 in 2000 and \$285,816 in 2001.

In 1999, we increased the amount of office space we lease by approximately 1,700 square feet. This additional space should increase our annual lease obligations by less than \$15,000 annually.

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 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:

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

We believe that our available funds, including the net proceeds from this offering, will be sufficient to fund our operations at least through 2001. However, this is a forward-looking statement, and there may be changes that would consume available resources significantly before such time. Our long-term capital requirements and the adequacy of our available funds will depend upon many factors, including:

- the progress of our research, drug discovery and development programs;
- changes in existing collaborative relationships;
- our ability to establish additional collaborative relationships;
- the magnitude of our research and development programs;
- the scope and results of preclinical studies and clinical trials to identify drug candidates;
- competitive and technological advances;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims;
- our dependence on others, 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
- 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.

RISKS ASSOCIATED WITH THE YEAR 2000

The year 2000 issue is the result of computer programs being written using two digits rather than four digits to represent the year. Thus, computer software may recognize a date using "00" as the year 1900 rather than the year 2000. This could result in system failures or miscalculations causing disruptions of operations, including a temporary inability to process certain data or engage in similar normal business activities.

PLAN AND STATUS. Our plan to resolve the year 2000 issue involves four phases: assessment, remediation, testing and implementation. We have completed an assessment of our systems. In 1997, we installed a computer network, upgraded our desktop computers and upgraded our information technology software to a common standard. Most of our information technology systems are identified by the manufacturer as year 2000 compliant because of this upgrade. Major vendors and suppliers have been contacted with regard to their year 2000 compliance and we will continue to monitor their compliance. Systems identified as not being year 2000 compliant will be brought into compliance by upgrading either the software or hardware. We have begun remediation and testing and expect our plan to be fully implemented by the end of 1999.

While we have queried our significant suppliers, vendors and other outside parties and will continue to monitor their year 2000 compliance status, we have no means of ensuring that suppliers, vendors and other outside parties will be year 2000 ready. The inability of suppliers, vendors and other outside parties, including the government, to complete their year 2000 compliance process in a timely fashion could materially impact us. We cannot determine the effect on us of non-compliance by suppliers, vendors and outside parties.

COSTS. Our costs incurred to date for year 2000 compliance have not been material and are not expected to be material when completed. We anticipate that we will be able to fund our costs from current funds available for operations. If, however, the costs are higher than anticipated, this could have a material adverse effect on our business, results of operations and financial condition.

RISKS. While we believe we have an effective program in place to resolve the year 2000 issue in a timely manner, as noted above, we have not completed all necessary phases of the year 2000 program for compliance. In the event that we, or third parties we depend upon, are not fully compliant by the year's end, we may not be able to complete the testing of our compounds and advance our projects into clinical trials as required to support the filings with the FDA which are necessary to our business. In addition, disruptions in the economy generally resulting from year 2000 issues could also materially adversely effect us. We are unable to estimate any potential liability or potential lost revenue at this time. We may not discover year 2000 compliance issues that will have a material adverse effect on our business, results of operations and financial condition.

CONTINGENCY. We have contingency plans for certain critical applications and are working on such plans for others. These contingency plans involve, among other actions, performing the work manually, increasing inventories and adjusting staffing strategies. These contingency plans may not be adequate.

OVERVIEW

BioCryst Pharmaceuticals, Inc. is a biotechnology company focused on the development of pharmaceuticals for the treatment of infectious, T-cell related and cardiovascular diseases and disorders. Our most advanced drug candidate, BCX-1812, is 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. They have informed us that the planning of Phase III trials for the 1999/2000 flu season is underway.

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. Our drug development efforts are primarily focused on the development of potent, selective inhibitors of enzyme targets associated with several diseases. Inhibition of these enzymes might be effective in the treatment of infectious, T-cell related and cardiovascular diseases and disorders. The principal elements of our strategy are:

- SELECT AND LICENSE PROMISING ENZYME TARGETS FOR THE DEVELOPMENT OF SMALL-MOLECULE PHARMACEUTICALS. We use our technical expertise and network of academic and industry contacts to evaluate and select promising enzyme targets to license for developing small-molecule pharmaceuticals. A small-molecule pharmaceutical is characterized by low molecular weight and can therefore be taken orally rather than administered intravenously. 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 relevant preclinical test models; and
 - have the potential for short duration clinical trials.
- FOCUS ON HIGH VALUE-ADDED, STRUCTURE-BASED DRUG DESIGN TECHNOLOGIES. We focus our drug-discovery activities and expenditures on applications of structure-based drug design technologies to design, develop and optimize drug candidates. 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.
- DEVELOP INHIBITORS THAT ARE PROMISING CANDIDATES FOR COMMERCIALIZATION. We test multiple compounds to identify those that are most promising for clinical development. Our selection of promising development candidates is based on product characteristics, including bioavailability, IN VITRO and IN VIVO activity and safety. We believe that this focused strategy allows us to eliminate unpromising candidates from consideration sooner without incurring substantial clinical costs. In addition, drug candidates are selected 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 outsourcing and partnering. With only 56 employees, we maintain a streamlined corporate infrastructure that focuses exclusively on our core areas of expertise. By outsourcing the non-core aspects of our business, 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 outsourcing and partnering strategy include:

- ENTERING INTO RELATIONSHIPS WITH ACADEMIC INSTITUTIONS AND BIOTECHNOLOGY COMPANIES. Many academic institutions and biotechnology companies perform extensive research on the molecular and structural biology of potential drug development targets. By entering into relationships with these institutions, we believe we can significantly reduce the time, cost and risks involved in drug target development. Our collaborative relationships with such organizations may lead to the licensing of one or more drug targets. 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.

- PARTNERING DEVELOPMENT CANDIDATES. We plan to advance drug candidates through preclinical development and early-stage clinical trials, then license to pharmaceutical or biotechnology partners for final development and global marketing. We believe collaborative 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 development while benefitting 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 advanced-stage clinical trials.

PRODUCTS UNDER DEVELOPMENT

The following table summarizes our development projects as of October 8, 1999:

PROGRAM AND INDICATION	DELIVERY FORM	DEVELOPMENT STAGE	WORLDWIDE RIGHTS
NEURAMINIDASE INHIBITOR (BCX-1812)			
Influenza	Oral	A Phase II--Completed	PRI/ Ortho-McNeil(1)
PNP INHIBITOR (BCX-34)			
Cutaneous T-Cell Lymphoma	Oral	Phase I/II--Underway	BioCryst
Other T-Cell Cancers	Intravenous	Phase I/II--Planned	BioCryst
COMPLEMENT INHIBITORS			
Cardiopulmonary Bypass Surgery	Intravenous	Preclinical--Ongoing	BioCryst

(1) Our neuraminidase inhibitor, BCX-1812, has been licensed to PRI and Ortho-McNeil, both Johnson & Johnson companies.

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, it 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. The annual cost to the U.S. economy associated with influenza epidemics was estimated to be in excess of \$12 billion, according to a 1994 article in THE NEW ENGLAND JOURNAL OF MEDICINE.

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, which are both ion channel blockers, are used for treatment of influenza A but are ineffective against influenza B and cause some adverse side effects. In addition, 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 antigenic structure 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 if the neuraminidase enzyme were inhibited, the new viruses would remain 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 are developing neuraminidase inhibitors. Hoffmann-La Roche has developed an orally active neuraminidase inhibitor and filed a new drug application with the FDA for this twice-a-day treatment. Similarly, Glaxo Wellcome's neuraminidase inhibitor, which is administered by dry powder inhaler twice a day, received FDA approval and has recently been launched in the United States and other countries.

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 crystallographic structural studies 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:

- excellent safety profile;
- inhibition of both influenza A and B;
- effective when taken orally;
- probable once-a-day dosage; and
- can be made into a liquid form, allowing for use by the elderly and young children.

CLINICAL DEVELOPMENT. In September 1998, we 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. Since the collaboration was established, PRI selected BCX-1812 for clinical development and moved through Phase I clinical trials and a Phase II clinical study by August 1999. We recently announced preliminary results from 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. We have been informed by PRI that planning of Phase III clinical trials for the 1999/2000 influenza season is underway. The FDA may not accept the Phase III clinical protocols, PRI may not commence the Phase III clinical trials in 1999 or at all, or the Phase III clinical trials, if initiated, may not be successful.

PNP INHIBITOR (BCX-34)

T-CELL RELATED DISEASES

OVERVIEW. The human immune system employs specialized cells, including T-cells, to control infection by recognizing and attacking disease-causing viruses, bacteria and parasites. T-cells are an essential part of the body's immune system that serve a dual purpose--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.

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. Our lead PNP inhibitor drug candidate, BCX-34, is designed 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 topical cream formulation of BCX-34, which, if effective, could have led to a rapid, cost-effective regulatory approval. We conducted two Phase III, double-blinded placebo controlled clinical trials in 1996 and 1997 to determine the effects of topical BCX-34 on psoriasis 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, it 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.

On the basis of these studies, we have designed two new Phase I/II clinical trials to evaluate BCX-34 in the treatment of various T-cell cancers. Although the patient population for T-cell cancers is small, we believe that we can more quickly evaluate the efficacy of BCX-34 because these patients are suffering from a serious unmet medical need and have a generally unfavorable clinical outlook.

One of these clinical trials is being conducted to evaluate BCX-34 for the treatment of cutaneous T-cell lymphoma at the maximum oral dose. This trial is expected to be completed in early 2000. The second trial is for treatment of T-cell cancers, such as T-lymphoblastic leukemias and lymphomas. This trial, which is expected to start in 2000, is being designed to evaluate higher blood levels of BCX-34, which can only be obtained with intravenous therapy.

These two clinical trials should provide us with the necessary information to begin other studies in T-cell related diseases. Hence, our future clinical evaluation of BCX-34 will be determined by the outcome of these two studies in T-cell cancers. If we are unable to demonstrate the clinical efficacy of BCX-34 at these higher dose levels, we will likely discontinue developing 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 foreign pathogens or materials. Once the immune system recognizes a "foreign invader," complement is activated to destroy or remove it. The complement cascade is 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.

Complement enzymes circulate in the blood in an inactive form. When the complement enzymes are activated, they can result in 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 blood clot is formed by a series of complicated reactions that are initiated by the Tissue Factor/ VIIa complex. 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.

STRUCTURE-BASED DRUG DESIGN

Structure-based drug design is a drug discovery approach by which synthetic compounds are designed 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, combinatorial chemistry, computer modeling of molecular structures and protein biophysical chemistry 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 iterative 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, IN VITRO and IN VIVO testing facilities, X-ray crystallography, computer and graphics equipment and formulation facilities.

During the years ended December 31, 1996, 1997 and 1998, we spent an aggregate of \$27.5 million on research and development. Approximately \$15.2 million of that amount was spent on in-house research and development, and \$12.3 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-Registered Trademark-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 addition, we may receive 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. The exclusive license agreement was terminated by Torii 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.

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 third 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: two provisional U.S. patent applications and a patent cooperation treaty application related to our neuraminidase inhibitors; two provisional U.S. patent applications related to compounds and methods for detecting influenza virus; a patent cooperation treaty application related to complement inhibitors; and a provisional application relating to inhibiting T-cell proliferation. 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, BCX-1812 will likely be the third influenza neuraminidase inhibitor to the market behind the influenza neuraminidase inhibitors currently marketed by Glaxo Wellcome and in development by 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, T-cell related 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. Hoffmann-La Roche, in collaboration with Gilead Sciences, also has an influenza neuraminidase inhibitor which is under review by the FDA. If approved, our influenza neuraminidase inhibitor, BCX-1812, will likely be the third neuraminidase inhibitor to the market. 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, as well as over-the-counter products. 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:

- delays;
- warning letters;

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

The regulatory review and approval process is lengthy, expensive and uncertain. Before obtaining regulatory approvals for the commercial sale of any products, our product candidates must be demonstrated to be 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, laboratory and animal studies are carried out to determine safety and biological activity. After completing preclinical trials, an investigational new drug application, including a proposal to begin clinical trials, must be filed with the FDA. We have filed eight investigational new drug applications to date and plan to file, or rely on certain collaborative 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.

Phase I trials to determine safety are conducted in a small group of patients or healthy volunteers. Tolerances and the metabolic and pharmacologic actions of our drug candidates at different doses are also assessed. After completion of the initial trial, a Phase II trial is conducted to assess safety and efficacy and establish the optimal dose in patients. If Phase II is successful, a Phase III trial is conducted 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:

- the size of the patient population we intend to treat;
- the availability of patients;
- the willingness of patients to participate; and
- 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, a new drug application is submitted to the FDA for marketing approval before commercialization of the product. Approval may not be granted 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. Any required approvals, once obtained, may be withdrawn.

In addition to clinical development regulations, we and our contract manufacturers and collaborators also are required to 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 efficacy data for our Phase II dose-ranging studies of topical BCX-34 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 topical BCX-34 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:

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

Following the failure of topical BCX-34 in 1997, we discontinued the development of the topical formulations of BCX-34. 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 a topical formulation of BCX-34, 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.

SCIENTIFIC ADVISORY BOARD AND CONSULTANTS

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

The scientific advisory board consists of the following individuals:

NAME	POSITION
Albert F. LoBuglio, M.D. (Chairman).....	Professor of Medicine and the Director of The University of Alabama at Birmingham Comprehensive Cancer Center.
Gordon N. Gill, M.D.	Professor of Medicine and Chair of the Faculty of Basic Biomedical Sciences at the University of California, San Diego School of Medicine.
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.	Professor, Molecular Biology and Genetics Department at The Johns Hopkins University School of Medicine, retired, Director of DNA Resources at Celera Genomics Corporation, recipient of the Nobel Prize 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.

HUMAN RESOURCES

As of October 8, 1999, we had 56 employees, of whom 43 were engaged in research and development and 13 were in general and administrative functions. Our scientific staff, 19 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.

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.

LEGAL PROCEEDINGS

We are not currently a party in any material legal proceedings.

MANAGEMENT

EXECUTIVE OFFICERS AND DIRECTORS

The following table shows information about our executive officers and directors as of October 8, 1999:

NAME	AGE	POSITION
Charles E. Bugg, Ph.D.....	58	Chairman, Chief Executive Officer and Director
J. Claude Bennett, M.D.....	65	President, Chief Operating Officer, Medical Director and Director
John A. Montgomery, Ph.D.	75	Senior Vice President, Secretary, Chief Scientific Officer and Director
Ronald E. Gray.....	58	Chief Financial Officer, Assistant Secretary and Treasurer
John R. Uhrin.....	46	Vice President, Corporate Development
William W. Featheringill.....	56	Director
Edwin A. Gee, Ph.D.....	79	Director
Zola P. Horovitz, Ph.D.....	64	Director
Joseph H. Sherrill, Jr.....	58	Director
William M. Spencer, III.....	78	Director
Randolph C. Steer, M.D., Ph.D.....	49	Director

Messrs. Featheringill and Spencer and Dr. Gee are members of our Compensation and Audit Committees.

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 BioCryst in that position. Prior to joining BioCryst, Dr. Bugg had served as the Director of the Center for Macromolecular Crystallography, Associate Director of the Comprehensive Cancer Center and Professor of Biochemistry at The University of Alabama at Birmingham since 1975. He was a Founder of BioCryst and served as BioCryst's first Chief Executive Officer from 1987 to 1988 while on a sabbatical from The University of Alabama at Birmingham. Dr. Bugg also served as Chairman of our scientific advisory board from January 1986 to November 1993. He continues to hold the position of Professor Emeritus in Biochemistry and Molecular Genetics at The University of Alabama at Birmingham, 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. He was appointed our Medical Director in August 1999. Prior to joining BioCryst, Dr. Bennett was President of The University of Alabama at Birmingham from October 1993 to December 1996, Professor and Chairman of the Department of Medicine of The University of Alabama at Birmingham from January 1982 to October 1993, and Professor and Chairman of the Department of Microbiology from January 1970 to December 1982. Dr. Bennett served on BioCryst's scientific advisory board from 1989 to 1996. He continues to hold the position of Distinguished University Professor Emeritus at The University of Alabama at Birmingham, a position he has held since January 1997.

JOHN A. MONTGOMERY, PH.D. has been a Director since November 1989 and has been Secretary and Chief Scientific Officer since joining BioCryst 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 BioCryst, Dr. Montgomery served as Senior Vice President of Southern Research Institute of Birmingham from January 1981 to February 1990. He continues to hold the position of Distinguished Scientist at Southern Research Institute, a position he has held since February 1990.

RONALD E. GRAY joined BioCryst in January 1993 as Chief Financial Officer. Mr. Gray received the additional title of Assistant Secretary in December 1993 and Treasurer in January, 1995. 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.

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

WILLIAM W. FEATHERINGILL was elected a Director in May 1995. Since June 1995, Mr. Featheringill has been Chairman and Chief Executive Officer 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. From 1988 to 1995, Mr. Featheringill was Chairman and Chief Executive Officer of MACESS Corporation, which designs and installs paperless data management systems for the managed care industry. 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. Complete Health Services, Inc. was acquired by United HealthCare Corporation in June 1994. Mr. Featheringill is a director of Citation Corporation.

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 1990, 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 Board of Directors of Avigen, Inc., Clinico Inc., Diacrin, Inc., Magainin Pharmaceuticals, Inc., Procept Corporation, Roberts Pharmaceutical Corporation and Synaptic Pharmaceutical Corp. Dr. Horovitz is also 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 Asia Pacific, based in Hong Kong, where he oversaw R.J. Reynolds' 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 R.J. Reynolds include Senior Vice President of Marketing for R.J. Reynolds International, President and Chief Executive Officer of R.J. Reynolds Tabacos de Brazil, and President and General Manager of R.J. Reynolds Puerto Rico.

WILLIAM M. SPENCER, III was a Founder and has been a Director of BioCryst since its inception. He served as Chairman of the Board of BioCryst 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 active as a consultant to biotechnology and pharmaceutical companies since 1989. Dr. Steer serves on the Board of Directors of Techne Corporation.

PRINCIPAL STOCKHOLDERS

The following table shows information regarding beneficial ownership of our common stock as of September 20, 1999 by:

- each of our directors and executive officers;
- all directors and executive officers as a group; and
- each person known by us to be the beneficial owner of more than five percent of our common stock.

NAME OF BENEFICIAL OWNER	NUMBER OF SHARES BENEFICIALLY OWNED(1)	PERCENT OF COMMON STOCK BENEFICIALLY OWNED	
		BEFORE OFFERING	AFTER OFFERING
William W. Featheringill..... 100 Brookwood Place #410 Birmingham, Alabama 35209	2,699,872(2)	17.7%	15.6%
Johnson & Johnson Development Corporation..... One Johnson & Johnson Plaza New Brunswick, New Jersey 08933	918,836(3)	6.0	5.3
Max Cooper..... 121 Summit Parkway Birmingham, Alabama 35209	780,100(4)	5.1	4.5
Charles E. Bugg, Ph.D.....	609,127(5)	3.9	3.4
William M. Spencer, III.....	539,858(6)	3.5	3.1
Joseph H. Sherrill, Jr.....	421,500(7)	2.8	2.4
John A. Montgomery, Ph.D.	160,620(8)	1.0	0.9
J. Claude Bennett, M.D.	107,460(9)	*	*
Ronald E. Gray.....	88,672(10)	*	*
Randolph C. Steer, M.D., Ph.D.	74,999(11)	*	*
Zola P. Horovitz, Ph.D.....	43,749(11)	*	*
Edwin A. Gee, Ph.D.	39,999(11)	*	*
John R. Uhrin.....	26,246(12)	*	*
All executive officers and directors as a group (11 persons).....	4,812,102(13)	29.4	26.2

* Less than one percent.

(1) Gives effect to the shares of common stock issuable within 60 days after September 20, 1999 upon the exercise of all options and other rights beneficially held by the indicated stockholder on that date.

(2) Includes 364,900 shares of common stock held by the Featheringill Family Trust of which he is a beneficial owner and 32,500 shares of common stock issuable upon exercise of stock options.

(3) Johnson & Johnson Development Corporation is a wholly owned subsidiary of Johnson & Johnson and shares investment and voting power with Johnson & Johnson.

(4) Based on filings made by Mr. Cooper with the SEC.

- (5) Includes 539,084 shares of common stock issuable upon exercise of stock options.
- (6) Includes 43,749 shares of common stock issuable upon exercise of stock options and 10,000 shares of common stock held by Mr. Spencer's spouse. Mr. Spencer disclaims beneficial ownership of the 10,000 shares of common stock held by his spouse.
- (7) Includes 32,500 shares of common stock issuable upon exercise of stock options, 10,000 shares of common stock which Mr. Sherrill holds jointly with his spouse, 1,000 shares of common stock held by Mr. Sherrill's son and 10,000 shares of common stock held by Mr. Sherrill's spouse. Mr. Sherrill disclaims beneficial ownership of the 11,000 shares of common stock held by his spouse and son.
- (8) Includes 127,498 shares of common stock issuable upon exercise of stock options and 12,600 shares of common stock held by Dr. Montgomery's spouse. Dr. Montgomery disclaims beneficial ownership of the 12,600 shares of common stock held by his spouse.
- (9) Includes 102,725 shares of common stock issuable upon exercise of stock options.
- (10) Includes 1,500 shares of common stock held by the retirement accounts of Mr. Gray and his spouse and 78,394 shares of common stock issuable upon exercise of stock options.
- (11) Represents shares of common stock issuable upon exercise of stock options.
- (12) Includes 21,666 shares of common stock issuable upon exercise of stock options.
- (13) See Note (2) and Notes (5) through (12).

RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Dr. Charles E. Bugg, an executive officer and Director of BioCryst, is a Professor Emeritus of The University of Alabama at Birmingham and is paid an annual stipend of \$9,040 by The University of Alabama at Birmingham. Dr. Bennett, an executive officer and Director of BioCryst, is a consultant to and a Distinguished University Professor of The University of Alabama at Birmingham and is paid an annual stipend of \$12,500 by The University of Alabama at Birmingham Education Foundation. We paid approximately \$877,000 in 1998 and approximately \$281,000 in the eight months ended August 31, 1999 to The University of Alabama at Birmingham for royalty payments, conducting clinical trials, research and data analysis.

Dr. John A. Montgomery, an executive officer and Director of BioCryst, is a former executive officer of Southern Research Institute. He is currently a Distinguished Scientist at Southern Research Institute and was paid approximately \$6,482 by Southern Research Institute in 1998 for various consulting services unrelated to the services performed by Southern Research Institute for us. We paid approximately \$209,000 in 1998 and approximately \$28,000 in the eight months ended August 31, 1999 to Southern Research Institute for research, library use and supplies.

Johnson & Johnson Development Corporation owns 918,836 shares of our common stock, which represents 6% of our common stock before the offering and 5.3% after the offering. Johnson & Johnson Development Corporation, the R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil are all Johnson & Johnson companies. In September 1998, we entered into an exclusive worldwide license agreement with The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil to develop and market our proprietary 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 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 achievement of specified developmental and regulatory milestones and royalties on product sales, if any. The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil are responsible for all development, regulatory and commercialization expenses. The agreement is subject to termination by The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil at any time and by us in certain circumstances.

UNDERWRITING

Subject to the terms and conditions stated in the underwriting agreement, each underwriter named below has severally agreed to purchase, and we have agreed to sell to such underwriter, the number of shares set forth opposite the name of such underwriter.

NAME	NUMBER OF SHARES
Salomon Smith Barney Inc.	
Hambrecht & Quist LLC.....	
Raymond James & Associates, Inc.....	
Total.....	2,000,000 =====

The underwriting agreement provides that the obligations of the several underwriters to purchase the shares included in this offering are subject to approval of legal matters by counsel and other conditions, including receipt of certificates from us, receipt of letters from our accountants, the status of the trading of our common stock on Nasdaq or securities on the New York Stock Exchange or Nasdaq and the absence of a banking moratorium, hostilities or a crisis. The underwriters are obligated to purchase all the shares (other than those covered by the over-allotment option described below) if they purchase any of the shares.

The underwriters propose to offer some of the shares directly to the public at the public offering price set forth on the cover page of this prospectus and some of the shares to certain dealers at the public offering price less a concession not in excess of \$ _____ per share. The underwriters may allow, and such dealers may reallow, a concession not in excess of \$ _____ per share on sales to other dealers. If all of the shares are not sold at the initial offering price, the representatives may change the public offering price and the other selling terms.

We have granted the underwriters a 30-day option to purchase up to an additional 300,000 shares to cover over-allotments, if any. The underwriters may exercise such option solely for the purpose of covering over-allotments, if any, in connection with this offering. To the extent such option is exercised, each underwriter will be obligated, subject to the conditions stated above, to purchase a number of additional shares approximately proportionate to such underwriter's initial purchase commitment.

Our officers and directors and Johnson & Johnson Development Corporation have agreed that, for a period of 90 days from the date of this prospectus, they will not, without the prior written consent of Salomon Smith Barney Inc., dispose of or hedge any shares of our common stock or any securities convertible into or exchangeable for common stock. Salomon Smith Barney Inc. in its sole discretion may release any of the securities subject to these lock-up agreements at any time without notice.

The common stock is quoted on the Nasdaq National Market under the symbol "BCRX."

The following table shows the underwriting discounts and commissions to be paid to the underwriters by us in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares of common stock.

	PAID TO US	
	NO EXERCISE	FULL EXERCISE
Per share.....	\$	\$
Total.....	\$	\$

In connection with the offering, Salomon Smith Barney Inc., on behalf of the underwriters, may purchase and sell shares of common stock in the open market. These transactions may include

over-allotment, syndicate covering transactions and stabilizing transactions. Over-allotment involves syndicate sales of common stock in excess of the number of shares to be purchased by the underwriters in the offering, which creates a syndicate short position. Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. Stabilizing transactions consist of certain bids or purchases of common stock made for the purpose of preventing or retarding a decline in the market of price of the common stock while the offering is in progress.

The underwriters also may impose a penalty bid. Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when Salomon Smith Barney Inc., in covering syndicate short positions or making stabilizing purchases, repurchases shares originally sold by that syndicate member.

Any of these activities may cause the price of the common stock to be higher than the price that otherwise would exist in the open market in the absence of such transactions. These transactions may be effected on the Nasdaq National Market or in the over-the-counter market, or otherwise and, if commenced, may be discontinued at any time.

In addition, in connection with this offering, the underwriters (and selling group members) may engage in passive market making transactions in the common stock on the Nasdaq National Market, prior to the pricing and completion of the offering. Passive market making consists of displaying bids on the Nasdaq National Market no higher than the bid prices of independent market makers and making purchases at prices no higher than those independent bids and effected in response to order flow. Net purchases by a passive market maker on each day are limited to a specified percentage of the passive market maker's average daily trading volume in the common stock during a specified period and must be discontinued when such limit is reached. Passive market making may cause the price of the common stock to be higher than the price that otherwise would exist in the open market in the absence of such transactions. If passive market making is commenced, it may be discontinued at any time.

We estimate that the total expenses, excluding underwriting discounts and commissions, of this offering will be \$550,000.

We have agreed to indemnify the underwriters against liabilities to which they may become subject, including liabilities that may arise under the Securities Act of 1933, the Securities Exchange Act of 1934 or other federal or state statutory law or regulation, at common law or otherwise or to contribute to payments the underwriters may be required to make in respect of any of those liabilities.

LEGAL MATTERS

The validity of the common stock offered in this prospectus will be passed upon for BioCryst by Brobeck, Phleger & Harrison LLP, Broomfield, Colorado. As of October 8, 1999, a member of Brobeck, Phleger & Harrison LLP beneficially owned a total of 5,000 shares of our common stock. Other legal matters in connection with this offering will be passed upon for the underwriters by Cravath, Swaine & Moore, New York, New York.

EXPERTS

Ernst & Young LLP, independent auditors, have audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 1998, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in this registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

The statements in this prospectus under the sections "Risk Factors--We may fail to adequately protect or enforce our intellectual property rights or secure rights to third-party patents" and "Business--Patents and Proprietary Information" and other references in this prospectus to U.S. patent matters have been reviewed and approved by Pollock, Vande Sande & Amernick, R.L.L.P., our patent counsel, as experts on such matters and are included in this prospectus in reliance upon that review and approval.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission, or the SEC. You may read and copy any document we file at the public reference facilities of the SEC located at 450 Fifth Street, N.W., Washington D.C. 20549. You may obtain information on the operation of the SEC's public reference facilities by calling the SEC at 1-800-SEC-0330. You can also access copies of such material electronically on the SEC's home page on the World Wide Web at <http://www.sec.gov>.

This prospectus is part of a registration statement (Registration No. 333-87669) we filed with the SEC. The SEC permits us to "incorporate by reference" the information that we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file with the SEC after the date of this prospectus will automatically update and supercede this information. We incorporate by reference the following documents filed by us with the SEC (File No. 0-27066). We also incorporate by reference any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, after the date of this prospectus until the termination of this offering:

1. Our Annual Report on Form 10-K for the fiscal year ended December 31, 1998.
2. Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 1999 and June 30, 1999.
3. Our Proxy Statement dated April 2, 1999 filed in connection with our 1999 Annual Meeting of Stockholders.
4. The description of our common stock which is contained in our registration statement on Form 8-A filed under the Exchange Act on January 8, 1994, including any amendment or reports filed for the purpose of updating such description.

If you request a copy of any or all of the documents incorporated by reference, we will send to you the copies requested at no charge. However, we will not send exhibits to such documents, unless such exhibits are specifically incorporated by reference in such documents. You should direct requests for such copies to: Mr. Ronald E. Gray, Chief Financial Officer, BioCryst Pharmaceuticals, Inc., 2190 Parkway Lake Drive, Birmingham, Alabama 35244, (205) 444-4600.

2,000,000 SHARES

[LOGO]

COMMON STOCK

P R O S P E C T U S

, 1999

SALOMON SMITH BARNEY
HAMBRECHT & QUIST
RAYMOND JAMES & ASSOCIATES, INC.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth all costs and expenses, other than the underwriting discounts and commissions, payable by the company in connection with the sale of common stock being registered hereby. All of the amounts shown are estimates except the SEC registration fee, the NASD filing fee and the Nasdaq National Market additional listing fee.

	AMOUNT TO BE PAID -----
SEC registration fee.....	\$ 15,985
NASD filing fee.....	6,250
Nasdaq additional listing of shares fee.....	17,500
Accounting fees and expenses.....	40,000
Legal fees and expenses.....	260,000
Printing and engraving expenses.....	150,000
Transfer Agent and registrar fees.....	5,000
Miscellaneous.....	55,265

Total.....	\$ 550,000 =====

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's Board of Directors to grant, indemnification to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933, as amended (the "Act"). Article Eight of the Registrant's Composite Certificate of Incorporation provides for indemnification of its directors and officers and permissible indemnification of employees and other agents to the maximum extent permitted by the Delaware General Corporation Law. The Registrant has liability insurance for its Directors and Officers.

ITEM 16. EXHIBITS

The following is a list of Exhibits filed as part of the Registration Statement:

- 1.1 Form of Underwriting Agreement.
- 4.1 Specimen certificate for shares of the Registrant's Common Stock, incorporated herein by reference to Exhibit 4.1 the Registrant's Registration Statement No. 33-73868.
- 4.2 Provisions of the Composite Certificate of Incorporation and By-Laws of the Registrant defining rights of holders of Common Stock of the Registrant, incorporated herein by reference to Exhibits 3.1 and 3.2 to the Company's Form 10-Q for the second quarter ending June 30, 1995 dated August 11, 1995.
- 5.1 Opinion of Brobeck, Phleger & Harrison LLP.
- 23.1 Consent of Brobeck, Phleger & Harrison LLP (included in the opinion filed as Exhibit 5.1).
- 23.2 Consent of Ernst & Young LLP, independent accountants.
- 23.3 Consent of Pollock, Vande Sande & Amernick, R.L.L.P., special patent counsel to the Registrant.++
- 24.1 Power of Attorney (included with signature page).+
- 27.1 Financial Data Schedule.+

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+ Previously filed on September 23, 1999.

++To be filed by amendment.

ITEM 17. UNDERTAKINGS

Insofar as indemnification for liabilities arising under the Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described in Item 15 above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made of the securities offered hereby, a post-effective amendment to this Registration Statement;
- (i) To include any prospectus required by Section 10(a)(3) of the Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and

price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that the undertakings set forth in paragraphs (i) and (ii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") that are incorporated by reference in this registration statement.

(2) That, for the purpose of determining any liability under the Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on our behalf by the undersigned, thereunto duly authorized, in the City of Birmingham, State of Alabama, on October 22, 1999.

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 Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities indicated on October 8, 1999.

SIGNATURE	TITLE
/s/ CHARLES E. BUGG ----- Charles E. Bugg, Ph.D.	Chairman, Chief Executive Officer and Director (principal executive officer)
* ----- J. Claude Bennett, M.D.	President, Chief Operating Officer and Director
* ----- John A. Montgomery, Ph.D.	Senior Vice President, Secretary, Chief Scientific Officer and Director
* ----- Ronald E. Gray	Chief Financial Officer (principal financial and accounting officer)
* ----- William W. Featheringill	Director
* ----- Edwin A. Gee, Ph.D.	Director
* ----- Zola P. Horovitz, Ph.D.	Director
* ----- Joseph H. Sherrill, Jr.	Director
* ----- William M. Spencer, III	Director
* ----- Randolph C. Steer, M.D., Ph.D.	Director

*By: /s/ CHARLES E. BUGG

 Charles E. Bugg, Ph.D.
 ATTORNEY-IN-FACT**

** Pursuant to the power of attorney filed as part of the signature page to the Registration Statement on Form S-3, No. 333-87669, filed September 23, 1999.

EXHIBIT INDEX

- 1.1 Form of Underwriting Agreement.
- 4.1 Specimen certificate for shares of the Registrant's Common Stock, incorporated herein by reference to Exhibit 4.1 the Registrant's Registration Statement No. 33-73868.
- 4.2 Provisions of the Composite Certificate of Incorporation and By-Laws of the Registrant defining rights of holders of Common Stock of the Registrant, incorporated herein by reference to Exhibits 3.1 and 3.2 to the Company's Form 10-Q for the second quarter ending June 30, 1995 dated August 11, 1995.
- 5.1 Opinion of Brobeck, Phleger & Harrison LLP.
- 23.1 Consent of Brobeck, Phleger & Harrison LLP (included in the opinion filed as Exhibit 5.1).
- 23.2 Consent of Ernst & Young LLP, independent accountants.
- 23.3 Consent of Pollock, Vande Sande & Amernick, R.L.L.P., special patent counsel to the Registrant.++
- 24.1 Power of Attorney (included with signature page).+
- 27.1 Financial Data Schedule.+

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+ Previously filed on September 23, 1999.

++To be filed by amendment.

BioCryst Pharmaceuticals, Inc.

2,000,000 shares of Common Stock, par value of \$.01

Underwriting Agreement

New York, New York
, 1999

Salomon Smith Barney Inc.
Hambrecht & Quist LLC
Raymond James & Associates, Inc.
As Representatives of
the several Underwriters,
c/o Salomon Smith Barney Inc.
388 Greenwich Street
New York, NY 10013

Ladies and Gentlemen:

BioCryst Pharmaceuticals, Inc., a corporation organized under the laws of Delaware (the "Company"), proposes to sell to the several underwriters named in Schedule I hereto (the "Underwriters"), for whom you (the "Representatives") are acting as representatives, 2,000,000 shares of Common Stock, par value of \$.01 (the "Common Stock") of the Company (said shares to be issued and sold by the Company being hereinafter called the "Underwritten Securities"). The Company also proposes to grant to the Underwriters an option to purchase up to 300,000 additional shares of Common Stock to cover over-allotments (the "Option Securities"; the Option Securities, together with the Underwritten Securities, being hereinafter called the "Securities"). To the extent there are no additional Underwriters listed on Schedule I other than you, the term Representatives as used herein shall mean you, as Underwriters, and the terms Representatives and Underwriters shall mean either the singular or plural as the context requires. Any reference herein to the Registration Statement, a Preliminary Prospectus or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein pursuant to Item 12 of Form S-3 which were filed under the Exchange Act on or before the Effective Date of the Registration Statement or the issue date of such Preliminary Prospectus or the Prospectus, as the case may be; and any reference herein to the terms "amend", "amendment" or "supplement" with respect to the Registration Statement, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include the filing of any document under the

Exchange Act after the Effective Date of the Registration Statement, or the issue date of any Preliminary Prospectus or the Prospectus, as the case may be, deemed to be incorporated therein by reference. Certain terms used herein are defined in Section 17 hereof.

1. REPRESENTATIONS AND WARRANTIES. The Company represents and warrants to, and agrees with, each Underwriter as set forth below in this Section 1.

(a) The Company meets the requirements for use of Form S-3 under the Act and has prepared and filed with the Commission a registration statement (file number 333-87669) on Form S-3, including a related preliminary prospectus, for registration under the Act of the offering and sale of the Securities. The Company may have filed one or more amendments thereto, including a related preliminary prospectus, each of which has previously been furnished to you. The Company will next file with the Commission one of the following: either (1) prior to the Effective Date of such registration statement, a further amendment to such registration statement (including the form of final prospectus) or (2) after the Effective Date of such registration statement, a final prospectus in accordance with Rules 430A and 424(b). In the case of clause (2), the Company has included in such registration statement, as amended at the Effective Date, all information (other than Rule 430A Information) required by the Act and the rules thereunder to be included in such registration statement and the Prospectus. As filed, such amendment and form of final prospectus, or such final prospectus, shall contain all Rule 430A Information, together with all other such required information and, except to the extent the Representatives shall agree in writing to a modification, shall be in all substantive respects in the form furnished to you prior to the Execution Time or, to the extent not completed at the Execution Time, shall contain only such specific additional information and other changes (beyond that contained in the latest Preliminary Prospectus) as the Company has advised you, prior to the Execution Time, will be included or made therein.

(b) On the Effective Date, the Registration Statement did or will, and when the Prospectus is first filed (if required) in accordance with Rule 424(b) and on the Closing Date (as defined herein), the Prospectus (and any supplement thereto) will, comply in all material respects with the applicable requirements of the Act, the Exchange Act and the respective rules thereunder; on the

Effective Date and at the Execution Time, the Registration Statement did not or will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading; and, on the Effective Date, the Prospectus, if not filed pursuant to Rule 424(b), will not, and on the date of any filing pursuant to Rule 424(b) and on the Closing Date and any settlement date, the Prospectus (together with any supplement thereto) will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; PROVIDED, HOWEVER, that the Company makes no representations or warranties as to the information contained in or omitted from the Registration Statement, or the Prospectus (or any supplement thereto) in reliance upon and in conformity with information furnished in writing to the Company by or on behalf of any Underwriter through the Representatives specifically for inclusion in the Registration Statement or the Prospectus (or any supplement thereto).

(c) The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation with full corporate power and authority to own or lease, as the case may be, and to operate its properties and conduct its business as described in the Prospectus, and is duly qualified to do business as a foreign corporation and is in good standing under the laws of each jurisdiction which requires such qualification, except where the failure to be so qualified or be in good standing would not have a material adverse effect on the condition (financial or otherwise), profits, earnings, prospects, business or properties of the Company (a "Material Adverse Effect");

(d) The Company's authorized equity capitalization is as set forth in the Prospectus; the capital stock of the Company conforms in all material respects to the description thereof contained in the Prospectus; the outstanding shares of Common Stock have been duly and validly authorized and issued and are fully paid and nonassessable; the Securities have been duly and validly authorized, and, when issued and delivered to and paid for by the Underwriters pursuant to this Agreement, will be fully paid and nonassessable; the Securities are duly listed, and admitted and authorized for trading, subject to official notice of issuance, on the Nasdaq National Market; the certificates for the Securities comply with

the requirements of Delaware law; the holders of outstanding shares of capital stock of the Company are not entitled to preemptive or other rights to subscribe for the Securities and, except as set forth in the Prospectus, no options, warrants or other rights to purchase, agreements or other obligations to issue, or rights to convert any obligations into or exchange any securities for, shares of capital stock of or ownership interests in the Company are outstanding.

(e) There is no franchise, contract or other document of a character required to be described in the Registration Statement or Prospectus, or to be filed as an exhibit thereto, which is not described or filed as required.

(f) This Agreement has been duly authorized, executed and delivered by the Company and constitutes a valid and binding obligation of the Company enforceable in accordance with its terms.

(g) The Company is not and, after giving effect to the offering and sale of the Securities and the application of the proceeds thereof as described in the Prospectus, will not be an "investment company" as defined in the Investment Company Act of 1940, as amended.

(h) No consent, approval, authorization, filing with or order of any court or governmental agency or body is required in connection with the transactions contemplated herein, except such as have been obtained under the Act and such as may be required under the blue sky laws of any jurisdiction in connection with the purchase and distribution of the Securities by the Underwriters in the manner contemplated herein and in the Prospectus.

(i) Neither the issue and sale of the Securities nor the consummation of any other of the transactions herein contemplated nor the fulfillment of the terms hereof will conflict with, result in a material breach or violation or imposition of any lien, charge or encumbrance upon any property or assets of the Company pursuant to, (i) the charter or by-laws of the Company, (ii) the terms of any indenture, contract, lease, mortgage, deed of trust, note agreement, loan agreement or other agreement, obligation, condition, covenant or instrument to which the Company or any of its subsidiaries is a party or bound or to which its or their property is subject, or (iii) any statute, law, rule,

regulation, judgment, order or decree applicable to the Company of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company or any of its properties.

(j) No holders of securities of the Company have rights to the registration of such securities under the Registration Statement, except for such rights as have been effectively waived.

(k) The historical financial statements and schedules of the Company included in the Prospectus and the Registration Statement present fairly in all material respects the financial condition, results of operations and cash flows of the Company as of the dates and for the periods indicated, comply as to form with the applicable accounting requirements of the Act and have been prepared in conformity with generally accepted accounting principles applied on a consistent basis throughout the periods involved (except as otherwise noted therein). The selected financial data set forth under the caption "Prospectus Summary -- Summary Financial Data" and "Selected Financial Data" in the Prospectus and Registration Statement fairly present, on the basis stated in the Prospectus and the Registration Statement, the information included therein.

(l) No action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or its property is pending or, to the best knowledge of the Company, threatened that (i) could reasonably be expected to have a material adverse effect on the performance of this Agreement or the consummation of any of the transactions contemplated hereby or (ii) could reasonably be expected to have a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Prospectus (exclusive of any supplement thereto).

(m) The Company owns or leases all such properties as are reasonably necessary to the conduct of its operations as presently conducted.

(n) The Company is not in violation or default of (i) any provision of its charter or bylaws, (ii) the terms of any indenture, contract, lease, mortgage, deed of trust, note agreement, loan agreement or other agreement, obligation, condition, covenant or instrument to which it is a party or bound or to which its property

is subject, or (iii) any statute, law, rule, regulation, judgment, order or decree of any court, regulatory body, administrative agency, governmental body, arbitrator or other authority having jurisdiction over the Company or any of its properties, as applicable, except in the case of clauses (ii) or (iii), any such violation or default which would not, singly or in the aggregate, result in a Material Adverse Effect.

(o) Ernst & Young LLP, who have audited certain financial statements of the Company and delivered their report with respect to the audited consolidated financial statements and schedules included in the Prospectus, are independent public accountants with respect to the Company within the meaning of the Act and the applicable published rules and regulations thereunder.

(p) There are no transfer taxes or other similar fees or charges under federal law or the laws of any state, or any political subdivision thereof, required to be paid in connection with the execution and delivery of this Agreement or the issuance by the Company or sale by the Company of the Securities.

(q) The Company has filed all foreign, federal, state and local tax returns that are required to be filed or has requested extensions thereof (except in any case in which the failure so to file would not have a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Prospectus (exclusive of any supplement thereto)) and has paid all taxes required to be paid by it and any other assessment, fine or penalty levied against it, to the extent that any of the foregoing is due and payable, except for any such assessment, fine or penalty that is currently being contested in good faith or as would not have a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Prospectus (exclusive of any supplement thereto).

(r) To the Company's knowledge, no labor problem or dispute with the employees of the Company exists or is threatened or imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its principal suppliers, contractors or customers, that could reasonably be expected to have a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business, except

as set forth in or contemplated in the Prospectus (exclusive of any supplement thereto).

(s) The Company is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are adequate in accordance with customary industry standards in the businesses in which it is engaged; all policies of insurance insuring the Company's businesses, assets, employees, officers and directors are in full force and effect; the Company is in compliance with the terms of such policies and instruments in all material respects; and there are no claims by the Company under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause; the Company has not been refused any insurance coverage sought or applied for; and the Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Prospectus (exclusive of any supplement thereto).

(t) The Company possess all licenses, certificates, permits and other authorizations issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct its businesses, and the Company has not received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a Material Adverse Effect whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Prospectus (exclusive of any supplement thereto).

(u) The Company maintains a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and

(iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(v) The Company has not taken, directly or indirectly, any action designed to or which has constituted or which might reasonably be expected to cause or result, under the Exchange Act or otherwise, in stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

(w) The Company is (i) in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("Environmental Laws"), (ii) has received and is in compliance with all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct its businesses and (iii) has not received notice of any actual or potential liability for the investigation or remediation of any disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, except where such non-compliance with Environmental Laws, failure to receive required permits, licenses or other approvals, or liability would not, individually or in the aggregate, have a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Prospectus (exclusive of any supplement thereto). The Company has not been named as a "potentially responsible party" under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

(x) In the ordinary course of its business, the Company periodically reviews the effect of Environmental Laws on the business, operations and properties of the Company, in the course of which it identifies and evaluates associated costs and liabilities (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws, or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties). On the basis of such review, the Company has reasonably concluded that such associated costs and liabilities would not, singly or in the aggregate, have a material adverse effect on the condition (financial or

otherwise), prospects, earnings, business or properties of the Company, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Prospectus (exclusive of any supplement thereto).

(y) The Company has fulfilled its obligations, if any, under the minimum funding standards of Section 302 of the United States Employee Retirement Income Security Act of 1974 ("ERISA") and the regulations and published interpretations thereunder with respect to each "plan" (as defined in Section 3(3) of ERISA and such regulations and published interpretations) in which employees of the Company are eligible to participate and each such plan is in compliance in all material respects with the presently applicable provisions of ERISA and such regulations and published interpretations. The Company has not incurred any unpaid liability to the Pension Benefit Guaranty Corporation (other than for the payment of premiums in the ordinary course) or to any such plan under Title IV of ERISA.

(z) The Company has implemented a comprehensive, detailed program to analyze and address the risk that the computer hardware and software used by them may be unable to recognize and properly execute date-sensitive functions involving certain dates prior to and any dates after December 31, 1999 (the "Year 2000 Problem"), and reasonably believes that such risk will be remedied on a timely basis without material expense and will not have a Material Adverse Effect; and the Company believes, that each supplier, vendor or customer used by the Company has remedied or will remedy on a timely basis the Year 2000 Problem, except to the extent that a failure to remedy by any such supplier, vendor or customer would not have a Material Adverse Effect. The Company is in substantial compliance with the Commission's Release No. 33-3558.

(aa) The Company owns, possess, licenses or has other rights to use, on reasonable terms, all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, technology, know-how and other intellectual property (collectively, the "Intellectual Property") reasonably necessary for the conduct of the Company's business as now conducted or as proposed in the Prospectus to be conducted. Except as set forth in the Prospectus under the caption "Business-- Patents and Proprietary Information," and except where no Material Adverse Effect (a) there are no rights of third parties to any such Intellectual Property; (b) there is

no material infringement by third parties of any such Intellectual Property; (c) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others challenging the Company's rights in or to any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (d) there is no pending or threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (e) there is no pending or, to the Company's knowledge threatened action, suit, proceeding or claim by others that the Company infringes or otherwise violates any patent, trademark, copyright, trade secret or other proprietary rights of others, and the Company is unaware of any other fact which would form a reasonable basis for any such claim; (f) to the best of the Company's knowledge there is no U.S. patent or published U.S. patent application which contains claims that dominate or may dominate any Intellectual Property described in the Prospectus as being owned by or licensed to the Company or that interferes with the issued or pending claims of any such Intellectual Property; and (g) to the best of the Company's knowledge there is no prior art of which the Company is aware that may render any U.S. patent held by the Company invalid or any U.S. patent application held by the Company unpatentable which has not been disclosed to the U.S. Patent and Trademark Office.

(bb) The statements contained in the Prospectus under the captions "Risk Factors -- We may fail to adequately protect or enforce our intellectual property rights or secure rights to third party patents" and "Business -- Patents and Proprietary Information," insofar as such statements summarize legal matters, agreements, documents, or proceedings discussed therein, are accurate and fair summaries of such legal matters, agreements, documents or proceedings.

(cc) The Company has such permits, licenses, franchises, authorizations and clearances ("Permits") of governmental or regulatory authorities, including, without limitation, the Food and Drug Administration (the "FDA") of the U.S. Department of Health and Human Services and/or any committee thereof, as are reasonably necessary to own, lease and operate its properties and to conduct its business in the manner described in the Prospectus, subject to such qualifications as may be set forth in the Prospectus, except where such failure to receive such Permits would not, individually or in the

aggregate, be reasonably expected to have a Material Adverse Effect, except as set forth in or contemplated in the Prospectus (exclusive of any supplement thereto); subject to such qualifications as may be set forth in the Prospectus, the Company has fulfilled and performed all its material obligations with respect to the Permits, and no event has occurred which allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other material impairment of the rights of the holder of any Permit, subject in each case to such qualification as may be set forth in the Prospectus. Except as described in the Prospectus, none of the Permits contains any restriction that is materially burdensome to the Company.

(dd) Except to the extent disclosed in the Registration Statement and the Prospectus (or any amendment or supplement thereto), the clinical, pre-clinical and other studies and tests conducted by or on behalf of or sponsored by the Company or in which the Company or the Company's products under development have participated that are described in the Prospectus or the results of which are referred to in the Prospectus were and, if still pending, are being conducted in accordance with standard medical and scientific research procedures. The descriptions of the results of such studies and tests are accurate and complete in all material respects and fairly present the data derived from such studies and tests, and the Company has no knowledge of any other studies or tests the results of which are inconsistent with or otherwise call into question the results described or referred to in the Prospectus. Except to the extent disclosed in the Registration Statement and the Prospectus (or any amendment or supplement thereto), the Company has operated and currently is in compliance in all material respects with all applicable FDA rules, regulations and policies. Except to the extent disclosed in the Registration Statement and the Prospectus (or any amendment or supplement thereto), the Company has not received any notices or other correspondence from the FDA or any other governmental agency requiring the termination, suspension or modification of any clinical or pre-clinical studies or tests that are described in the Prospectus or the results of which are referred to in the Prospectus.

(ee) The Company has not received nor is it aware of any communication (written or oral) relating to the termination or modification or threatened termination or modification of any of the agreements described or referred to in the prospectus under the captions "Risk

Factors -- We are highly dependent on The R.W. Johnson Pharmaceutical Research Institute and Ortho-McNeil for substantially all of our revenue," "The success of our drug development programs depends solely upon third parties for many of the critical steps in the process" and "Business -- Collaborative Relationships," nor is it aware of any communication (written or oral) relating to any determination or threatened determination not to renew or extend any agreement described or referred to under such captions at the end of the current term of any such agreement.

Any certificate signed by any officer of the Company and delivered to the Representatives or counsel for the Underwriters in connection with the offering of the Securities shall be deemed a representation and warranty by the Company, as to matters covered thereby, to each Underwriter.

2. PURCHASE AND SALE. (a) Subject to the terms and conditions and in reliance upon the representations and warranties herein set forth, the Company agrees to sell to each Underwriter, and each Underwriter agrees, severally and not jointly, to purchase from the Company, at a purchase price of \$_____ per share, the amount of the Underwritten Securities set forth opposite such Underwriter's name in Schedule I hereto.

(b) Subject to the terms and conditions and in reliance upon the representations and warranties herein set forth, the Company hereby grants an option to the several Underwriters to purchase, severally and not jointly, up to an aggregate of 300,000 Option Securities at the same purchase price per share as the Underwriters shall pay for the Underwritten Securities. Said option may be exercised only to cover over-allotments in the sale of the Underwritten Securities by the Underwriters. Said option may be exercised in whole or in part at any time (but not more than once) on or before the 30th day after the date of the Prospectus upon written or telegraphic notice by the Representatives to the Company setting forth the number of shares of the Option Securities as to which the several Underwriters are exercising the option and the settlement date. The number of Option Securities to be purchased by each Underwriter shall be the same percentage of the total number of shares of the Option Securities to be purchased by the several Underwriters as such Underwriter is purchasing of the Underwritten Securities, subject to such adjustments as you in your absolute discretion shall make to eliminate any fractional shares.

3. DELIVERY AND PAYMENT. Delivery of and payment for the Underwritten Securities and the Option Securities

(if the option provided for in Section 2(b) hereof shall have been exercised on or before the third Business Day prior to the Closing Date) shall be made at 10:00 AM, New York City time, on _____, 1999, or at such time on such later date not more than three Business Days after the foregoing date as the Representatives shall designate, which date and time may be postponed by agreement between the Representatives and the Company or as provided in Section 9 hereof (such date and time of delivery and payment for the Securities being herein called the "Closing Date"). Delivery of the Securities shall be made to the Representatives for the respective accounts of the several Underwriters against payment by the several Underwriters through the Representatives of the purchase price thereof to or upon the order of the Company by wire transfer payable in same-day funds to an account specified by the Company. Delivery of the Underwritten Securities and the Option Securities shall be made through the facilities of The Depository Trust Company unless the Representatives shall otherwise instruct.

If the option provided for in Section 2(b) hereof is exercised after the third Business Day prior to the Closing Date, the Company will deliver the Option Securities (at the expense of the Company) to the Representatives on the date specified by the Representatives (which shall be within three Business Days after exercise of said option) for the respective accounts of the several Representatives, against payment by the several Underwriters through the Representatives of the purchase price thereof to or upon the order of the Company by wire transfer payable in same-day funds to an account specified by the Company. If settlement for the Option Securities occurs after the Closing Date, the Company will deliver to the Representatives on the settlement date for the Option Securities, and the obligation of the Underwriters to purchase the Option Securities shall be conditioned upon receipt of, supplemental opinions, certificates and letters confirming as of such date the opinions, certificates and letters delivered on the Closing Date pursuant to Section 6 hereof.

4. OFFERING BY UNDERWRITERS. It is understood that the several Underwriters propose to offer the Securities for sale to the public as set forth in the Prospectus.

5. AGREEMENTS. The Company agrees with the several Underwriters that:

(a) The Company will use its best efforts to cause the Registration Statement, if not effective at the Execution Time, and any amendment thereof, to become effective. Prior to the termination of the offering of

the Securities, the Company will not file any amendment of the Registration Statement or supplement to the Prospectus or any Rule 462(b) Registration Statement unless the Company has furnished you a copy for your review prior to filing and will not file any such proposed amendment or supplement to which you reasonably object. Subject to the foregoing sentence, if the Registration Statement has become or becomes effective pursuant to Rule 430A, or filing of the Prospectus is otherwise required under Rule 424(b), the Company will cause the Prospectus, properly completed, and any supplement thereto to be filed with the Commission pursuant to the applicable paragraph of Rule 424(b) within the time period prescribed and will provide evidence satisfactory to the Representatives of such timely filing. The Company will promptly advise the Representatives (1) when the Registration Statement, if not effective at the Execution Time, shall have become effective, (2) when the Prospectus, and any supplement thereto, shall have been filed (if required) with the Commission pursuant to Rule 424(b) or when any Rule 462(b) Registration Statement shall have been filed with the Commission, (3) when, prior to termination of the offering of the Securities, any amendment to the Registration Statement shall have been filed or become effective, (4) of any request by the Commission or its staff for any amendment of the Registration Statement, or any Rule 462(b) Registration Statement, or for any supplement to the Prospectus or for any additional information, (5) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or the institution or threatening of any proceeding for that purpose and (6) of the receipt by the Company of any notification with respect to the suspension of the qualification of the Securities for sale in any jurisdiction or the institution or threatening of any proceeding for such purpose. The Company will use its best efforts to prevent the issuance of any such stop order or the suspension of any such qualification and, if issued, to obtain as soon as possible the withdrawal thereof.

(b) If, at any time when a prospectus relating to the Securities is required to be delivered under the Act, any event occurs as a result of which the Prospectus as then supplemented would include any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein in the light of the circumstances under which they were made not misleading, or if, in the reasonable discretion of the Company, it shall be necessary to amend the Registration

Statement or supplement the Prospectus to comply with the Act or the Exchange Act or the respective rules thereunder, the Company promptly will (1) notify the Representatives of such event, (2) prepare and file with the Commission, subject to the second sentence of paragraph (a) of this Section 5, an amendment or supplement which will correct such statement or omission or effect such compliance and (3) supply any supplemented Prospectus to you in such quantities as you may reasonably request.

(c) As soon as practicable, the Company will make generally available to its security holders and to the Representatives an earnings statement or statements of the Company which will satisfy the provisions of Section 11(a) of the Act and Rule 158 under the Act.

(d) The Company will furnish to the Representatives and counsel for the Underwriters, without charge, signed copies of the Registration Statement (including exhibits thereto) and to each other Underwriter a copy of the Registration Statement (without exhibits thereto) and, so long as delivery of a prospectus by an Underwriter or dealer may be required by the Act, as many copies of each Preliminary Prospectus and the Prospectus and any supplement thereto as the Representatives may reasonably request. The Company will pay the expenses of printing or other production of all documents relating to the offering.

(e) The Company will arrange, if necessary, for the qualification of the Securities for sale under the laws of such jurisdictions as the Representatives may designate and will maintain such qualifications in effect so long as required for the distribution of the Securities and will pay any fee of the National Association of Securities Dealers, Inc., in connection with its review of the offering; provided that in no event shall the Company be obligated to qualify to do business in any jurisdiction where it is not now so qualified or to take any action that would subject it to service of process in suits, other than those arising out of the offering or sale of the Securities, in any jurisdiction where it is not now so subject.

(f) The Company will not, without the prior written consent of Salomon Smith Barney Inc., offer, sell, contract to sell, pledge, or otherwise dispose of, (or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic

disposition due to cash settlement or otherwise) by the Company or any affiliate of the Company or any person in privity with the Company or any affiliate of the Company) directly or indirectly, including the filing (or participation in the filing) of a registration statement with the Commission in respect of, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Exchange Act, any other shares of Common Stock or any securities convertible into, or exercisable, or exchangeable for, shares of Common Stock; or publicly announce an intention to effect any such transaction, for a period of 90 days after the date of the Underwriting Agreement, PROVIDED, HOWEVER, that the Company may issue and sell Common Stock pursuant to any employee stock option plan, stock ownership plan or dividend reinvestment plan of the Company in effect at the Execution Time and the Company may issue Common Stock issuable upon the conversion of securities or the exercise of warrants outstanding at the Execution Time.

(g) The Company will not take, directly or indirectly, any action designed to or which has constituted or which might reasonably be expected to cause or result, under the Exchange Act or otherwise, in stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

6. CONDITIONS TO THE OBLIGATIONS OF THE UNDERWRITERS. The obligations of the Underwriters to purchase the Underwritten Securities and the Option Securities, as the case may be, shall be subject to the accuracy of the representations and warranties on the part of the Company contained herein as of the Execution Time, the Closing Date and any settlement date pursuant to Section 3 hereof, to the accuracy of the statements of the Company made in any certificates pursuant to the provisions hereof, to the performance by the Company of its obligations hereunder and to the following additional conditions:

(a) If the Registration Statement has not become effective prior to the Execution Time, unless the Representatives agree in writing to a later time, the Registration Statement will become effective not later than (i) 6:00 PM New York City time, on the date of determination of the public offering price, if such determination occurred at or prior to 3:00 PM New York City time on such date or (ii) 9:30 AM on the Business Day following the day on which the public offering price was determined, if such determination occurred after

3:00 PM New York City time on such date; if filing of the Prospectus, or any supplement thereto, is required pursuant to Rule 424(b), the Prospectus, and any such supplement, will be filed in the manner and within the time period required by Rule 424(b); and no stop order suspending the effectiveness of the Registration Statement shall have been issued and no proceedings for that purpose shall have been instituted or threatened.

(b) The Company shall have requested and caused Brobeck, Phleger & Harrison LLP, counsel for the Company, to have furnished to the Representatives their opinion, dated the Closing Date and addressed to the Representatives, to the effect that:

(i) the Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the jurisdiction in which it is chartered or organized, with full corporate power and authority to own or lease, as the case may be, and to operate its properties and conduct its business as described in the Prospectus, and is duly qualified to do business as a foreign corporation and is in good standing under the laws of each jurisdiction which requires such qualification;

(ii) the authorized capital stock of the Company under the heading "Actual" under the caption "Capitalization" is as set forth in the Prospectus; the statements set forth under the caption "Description of Capital Stock" in the Prospectus, insofar as such statements purport to summarize certain provisions of the capital stock of the Company, provide a fair summary of such provisions; the shares of Common Stock of the Company outstanding prior to the issuance of the Securities have been duly authorized and validly issued and, to such counsel's knowledge, are fully paid and nonassessable; the Securities have been duly authorized, and, when issued and delivered to the Underwriters against payment therefor in accordance with the terms of this Agreement, will be fully paid and nonassessable; the Securities have been approved for quotation on the Nasdaq National Market, upon issuance as contemplated by this Agreement; the form of certificate for the Securities conforms in all material respects to the requirements of the Delaware General Corporation Law; to such counsel's knowledge, the holders of outstanding shares of capital stock of the Company

are not entitled to preemptive or other rights to subscribe for the Securities except for such rights as have been effectively waived; and, to such counsel's knowledge, except as described in the Prospectus, there are no outstanding securities of the Company convertible or exchangeable into, or evidencing the right to purchase or subscribe for, any shares of capital stock of the Company and there are no outstanding or authorized options, warrants or rights of a similar character obligating the Company to issue any shares of its capital stock or any securities convertible or exchangeable into or evidencing the right to purchase or subscribe for, any shares of such stock;

(iii) to the knowledge of such counsel (A) there are no legal or governmental proceedings pending or threatened against the Company, or to which the Company or any of its properties are subject, which are required to be disclosed in the Registration Statement or Prospectus (or any amendment or supplement thereto) that are not so described and (B) there are no agreements, contracts, indentures, leases or other instruments that are required to be described in the Registration Statement or Prospectus (or any amendment or supplement thereto) or to be filed as an exhibit to the Registration Statement that are not so described or filed, as the case may be; and the statements included or incorporated by reference in the prospectus under the headings "Risk Factors -- If we or our collaborative partners do not obtain and maintain governmental approvals for our products under development, we or our collaborative partners will not be able to sell these potential products, which would significantly harm our business," " -- We may fail to adequately protect or enforce our intellectual property rights or secure rights to third party patents," fairly summarize the matters therein described.

(iv) the Registration Statement and all post-effective amendments, if any, have become effective under the Act; any required filing of the Prospectus, and any supplements thereto, pursuant to Rule 424(b) has been made in accordance with Rule 424(b); to the knowledge of such counsel, no stop order suspending the effectiveness of the Registration Statement has been issued and no

proceedings for that purpose are pending before or contemplated by the Commission;

(v) this Agreement has been duly authorized, executed and delivered by the Company;

(vi) the Company is not and, after giving effect to the offering and sale of the Securities and the application of the proceeds thereof as described in the Prospectus, will not be, an "investment company" as defined in the Investment Company Act of 1940, as amended;

(vii) no consent, approval, authorization or other order of, or registration or filing with, any court, regulatory body, administrative agency or other governmental body, agency or official is required on the part of the Company (except (A) as have been obtained under the Act or (B) such as may be required under state securities or Blue Sky laws governing the purchase and distribution of the Securities, as to which such counsel expresses no opinion) for the valid issuance and sale of the Securities to the Underwriters as contemplated by this Agreement;

(viii) neither the offer, sale or delivery of the Securities, the execution, delivery or performance by the Company of this Agreement, compliance by the Company with the provisions of this Agreement, nor the consummation by the Company of the transactions herein contemplated (A) violates the charter or by-laws of the Company, or (B) constitutes a breach of, or a default under, any agreement, indenture, lease, or other instrument to which the Company is a party or any of its properties is bound or (C) will result in any violation of any existing law or regulation (other than applicable state securities and blue sky laws, as to which such counsel need express no opinion), or any ruling, judgment, injunction, order or decree known to us and applicable to the Company or any of its or their properties; and

(ix) To such counsel's knowledge and except as disclosed in the Prospectus, no holders of securities of the Company have the right to have any Common Stock or other securities of the Company included in the Registration Statement (except for such rights as have been effectively waived).

In addition, such counsel shall state:

Such counsel participated in conferences with certain officers and other representatives of the Company, its independent public accountants, the Underwriters and the Underwriters' counsel at which the contents of the Registration Statement, the Prospectus and related matters were discussed. Such counsel is not, however, passing upon, and does not assume any responsibility for, and has not independently checked or verified, the accuracy, completeness or fairness of the information contained in the Registration Statement and the Prospectus.

Such counsel shall state, however, that based upon their participation as described in the preceding paragraph, (i) they are of the opinion that the Registration Statement and Prospectus (other than the consolidated financial statements, including the notes and schedules thereto, and the other financial and statistical data included in the Registration Statement and Prospectus, as to which they express no opinion), at the time the Registration Statement became effective, complied as to form in all material respects with the requirements of the Act and the applicable rules and regulations thereunder, (ii) they confirm that they have no reason to believe that the Registration Statement (other than the consolidated financial statements including notes and schedules and other financial statistical information included in the Registration Statement, as to which they express no belief), at the time the Registration Statement became effective, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading, or (iii) they confirm that they have no reason to believe the Prospectus (other than the consolidated financial statements included the notes and schedules thereto, and the other financial and statistical data included in the Prospectus, as to which they express no belief), on the date such opinion is delivered, contains any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

In rendering such opinion, such counsel may rely (A) as to matters involving the application of laws of any jurisdiction other than the State of Delaware or the

federal laws of the United States, to the extent they deem proper and specified in such opinion, upon the opinion of other counsel of good standing whom they believe to be reliable and who are satisfactory to counsel for the Underwriters and (B) as to matters of fact, to the extent they deem proper, on certificates of responsible officers of the Company and public officials. References to the Prospectus in this paragraph (b) include any supplements thereto at the Closing Date.

(c) The Representatives shall have received from Cravath, Swaine & Moore, counsel for the Underwriters, such opinion or opinions, dated the Closing Date and addressed to the Representatives, with respect to the issuance and sale of the Securities, the Registration Statement, the Prospectus (together with any supplement thereto) and other related matters as the Representatives may reasonably require, and the Company shall have furnished to such counsel such documents as they request for the purpose of enabling them to pass upon such matters.

(d) The Company shall have furnished to the Representatives a certificate of the Company, signed by the Chairman of the Board or the President and the principal financial or accounting officer of the Company, dated the Closing Date, to the effect that the signers of such certificate have carefully examined the Registration Statement, the Prospectus, any supplements to the Prospectus and this Agreement and that:

(i) the representations and warranties of the Company in this Agreement are true and correct in all material respects on and as of the Closing Date with the same effect as if made on the Closing Date and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to the Closing Date;

(ii) no stop order suspending the effectiveness of the Registration Statement has been issued and no proceedings for that purpose have been instituted or, to the Company's knowledge, threatened; and

(iii) since the date of the most recent financial statements included or incorporated by reference in the Prospectus (exclusive of any supplement thereto), there has been no Material Adverse Effect, whether or not arising from transactions in

the ordinary course of business, except as set forth in or contemplated in the Prospectus (exclusive of any supplement thereto).

(e) The Company shall have requested and caused Ernst & Young LLP to have furnished to the Representatives, at the Execution Time and at the Closing Date, letters, dated respectively as of the Execution Time and as of the Closing Date, in form and substance satisfactory to the Representatives, confirming that they are independent accountants within the meaning of the Act and the Exchange Act and the respective applicable rules and regulations adopted by the Commission thereunder and that they have performed a review in accordance with Statement on Auditing Standards No. 71 of the unaudited interim financial information of the Company for the six-month period ended June 30, 1999, and as at June 30, 1999, stating in effect that:

(i) in their opinion the audited financial statements and financial statement schedules included or incorporated by reference in the Registration Statement and the Prospectus and reported on by them comply as to form in all material respects with the applicable accounting requirements of the Act and the Exchange Act and the related rules and regulations adopted by the Commission;

(ii) on the basis of a reading of the latest unaudited financial statements made available by the Company; their limited review, in accordance with standards established under Statement on Auditing Standards No. 71, of the unaudited interim financial information for the six-month period ended June 30, 1999 and as at June 30, 1999; carrying out certain specified procedures (but not an examination in accordance with generally accepted auditing standards) which would not necessarily reveal matters of significance with respect to the comments set forth in such letter; a reading of the minutes of the meetings of the stockholders, directors and of the Company; and inquiries of certain officials of the Company who have responsibility for financial and accounting matters of the Company as to transactions and events subsequent to December 31, 1998, nothing came to their attention which caused them to believe that:

(1) any unaudited financial statements included or incorporated by reference in the Registration Statement and the Prospectus do not comply as to form in all material respects with applicable accounting requirements of the Act and with the related rules and regulations adopted by the Commission with respect to financial statements included or incorporated by reference in quarterly reports on Form 10-Q under the Exchange Act; and said unaudited financial statements are not in conformity with generally accepted accounting principles applied on a basis substantially consistent with that of the audited financial statements included or incorporated by reference in the Registration Statement and the Prospectus;

(2) with respect to the period subsequent to June 30, 1999, there were any changes, at a specified date not more than five days prior to the date of the letter, in the accumulated deficit or capital stock of the Company or decreases in the stockholders' equity of the Company or decreases in working capital of the Company as compared with the amounts shown on the June 30, 1999, consolidated balance sheet included or incorporated by reference in the Registration Statement and the Prospectus, or for the period from June 30, 1999, to such specified date there were any decreases, as compared with the corresponding period in the preceding quarter in revenues or Interest Income of the Company, except in all instances for changes or decreases set forth in such letter, in which case the letter shall be accompanied by an explanation by the Company as to the significance thereof unless said explanation is not deemed necessary by the Representatives; or

(3) the information included or incorporated by reference in the Registration Statement and Prospectus in response to Regulation S-K, Item 301 (Selected Financial Data), Item 302 (Supplementary Financial Information) is not in conformity with the applicable disclosure requirements of Regulation S-K; and

(iii) they have performed certain other specified procedures as a result of which they determined that certain information of an accounting, financial or statistical nature (which is limited

to accounting, financial or statistical information derived from the general accounting records of the Company) set forth in the Registration Statement and the Prospectus and in Exhibit 12 to the Registration Statement, including the information set forth under the captions "Summary -- Summary Financial Data" and "Selected Financial Data" in the Prospectus, the information included or incorporated by reference in Items 1, 2, 6, 7 and 11 of the Company's Annual Report on Form 10-K, incorporated by reference in the Registration Statement and the Prospectus, and the information included in the "Management's Discussion and Analysis of Financial Condition and Results of Operations" included or incorporated by reference in the Company's Quarterly Reports on Form 10-Q, incorporated by reference in the Registration Statement and the Prospectus, agrees with the accounting records of the Company, excluding any questions of legal interpretation.

References to the Prospectus in this paragraph (e) include any supplement thereto at the date of the letter.

The Company shall have received from Ernst & Young LLP a report or reports with respect to a review of unaudited interim financial information of the Company for the two quarters ending June 30, 1999, in accordance with Statement on Accounting Standards No. 71.

(f) Subsequent to the Execution Time or, if earlier, the dates as of which information is given in the Registration Statement (exclusive of any amendment thereof) and the Prospectus (exclusive of any supplement thereto), there shall not have been (i) any change specified in the letter or letters referred to in paragraph (e) of this Section 6 or (ii) any change, or any development involving a prospective change, in or affecting the condition (financial or otherwise), earnings, business or properties of the Company, whether or not arising from transactions in the ordinary course of business, except as set forth in or contemplated in the Prospectus (exclusive of any supplement thereto) the effect of which, in any case referred to in clause (i) or (ii) above, is, in the sole judgment of the Representatives, so material and adverse as to make it impractical or inadvisable to proceed with the offering or delivery of the Securities as contemplated by the Registration Statement (exclusive of any amendment thereof) and the Prospectus (exclusive of any supplement thereto).

(g) Prior to the Closing Date, the Company shall have furnished to the Representatives such further information, certificates and documents as the Representatives may reasonably request.

(h) The Securities shall have been approved for trading on the Nasdaq National Market, and satisfactory evidence of such actions shall have been provided to the Representatives.

(i) At the Execution Time, the Company shall have furnished to the Representatives a letter substantially in the form of Exhibit A hereto from the individuals listed on SCHEDULE II hereto, addressed to the Representatives.

(j) You shall have received on the Closing Date an opinion of Pollock, Vande Sande & Amernick, R.L.L.P., patent counsel for the Company, dated the Closing Date and addressed to you, that:

(i) to the knowledge of such counsel after reasonable inquiry, the Company owns or has obtained licenses for all applications relating to the Intellectual Property described in the Prospectus as being owned or used by or licensed to the Company;

(ii) to the best knowledge of such counsel after reasonable inquiry (A) except as described in the Prospectus, there are no rights of third parties to any Intellectual Property described in the Prospectus as being owned by or licensed to the Company or that is necessary for the conduct of its business; (B) there is no infringement by third parties of any such Intellectual Property; (C) there is no pending or threatened action, suit, proceeding or claim by others challenging the rights of the Company in or to such Intellectual Property, and such counsel is unaware of any facts which would form a reasonable basis for any such claim; (D) there is no pending or threatened action, suit, proceeding or claim by others challenging the validity or scope of such Intellectual Property, and such counsel is unaware of any facts which would form a reasonable basis for any such claim; (E) there is no pending or threatened action, suit, proceeding or claim by others that the Company infringes or otherwise violates any patent, trademark, copyright, trade

secret or other proprietary right of others, and such counsel is unaware of any facts which would form a reasonable basis for any such claim; (F) there is no patent or patent application which contains claims that dominate or may dominate any Intellectual Property described in the Prospectus as being owned or used by or licensed to the Company or that is necessary for the conduct of its business or that interferes with the issued or pending claims of any such Intellectual Property; and (G) there is no prior art that may render any patent held by the Company invalid or any patent application held by the Company unpatentable which has not been disclosed to the U.S. Patent and Trademark Office; and

(iii) the statements in: (A) the Prospectus under the captions "Risk Factors -- Uncertainty of Protection of Patents and Proprietary Rights", "Business -- Patents and Proprietary Information" and other references therein to patent and licensing matters, and (B) the Annual Report of the Company on Form 10-K for the fiscal year ended December 31, 1998 under the caption "Business -- Patents and Proprietary Information," and other references therein to patent and licensing matters, insofar as such statements constitute a summary of legal matters, documents or proceedings referred to therein, are accurate and fairly present the information purported to be shown.

If any of the conditions specified in this Section 6 shall not have been fulfilled in all material respects when and as provided in this Agreement, or if any of the opinions and certificates mentioned above or elsewhere in this Agreement shall not be in all material respects reasonably satisfactory in form and substance to the Representatives and counsel for the Underwriters, this Agreement and all obligations of the Underwriters hereunder may be canceled at, or at any time prior to, the Closing Date by the Representatives. Notice of such cancellation shall be given to the Company in writing or by telephone or facsimile confirmed in writing.

The documents required to be delivered by this Section 6 shall be delivered at the office of Cravath, Swaine & Moore, counsel for the Underwriters, at Worldwide Plaza, 825 Eighth Avenue, New York, NY 10019-7475, on the Closing Date.

7. REIMBURSEMENT OF UNDERWRITERS' EXPENSES. If the sale of the Securities provided for herein is not consummated

because any condition to the obligations of the Underwriters set forth in Section 6 hereof is not satisfied, because of any termination pursuant to Section 10 hereof or because of any refusal, inability or failure on the part of the Company to perform any agreement herein or comply with any provision hereof other than by reason of a default by any of the Underwriters, the Company will reimburse the Underwriters severally through Salomon Smith Barney Inc. on demand for all out-of-pocket expenses (including reasonable fees and disbursements of counsel) that shall have been incurred by them in connection with the proposed purchase and sale of the Securities.

8. INDEMNIFICATION AND CONTRIBUTION. The Company agrees to indemnify and hold harmless each Underwriter, the directors, officers, employees and agents of each Underwriter and each person who controls any Underwriter within the meaning of either the Act or the Exchange Act against any and all losses, claims, damages or liabilities, joint or several, to which they or any of them may become subject under the Act, the Exchange Act or other Federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in the registration statement for the registration of the Securities as originally filed or in any amendment thereof, or in any Preliminary Prospectus or the Prospectus, or in any amendment thereof or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and agrees to reimburse each such indemnified party, as incurred, for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; PROVIDED, HOWEVER, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon any such untrue statement or alleged untrue statement or omission or alleged omission made therein in reliance upon and in conformity with written information furnished to the Company by or on behalf of any Underwriter through the Representatives specifically for inclusion therein. This indemnity agreement will be in addition to any liability which the Company may otherwise have.

(b) Each Underwriter severally and not jointly agrees to indemnify and hold harmless the Company, each of its directors, each of its officers who signs the Registration Statement, and each person who controls the Company within the meaning of either the Act or the Exchange Act, to the same

extent as the foregoing indemnity from the Company to each Underwriter, but only with reference to written information relating to such Underwriter furnished to the Company by or on behalf of such Underwriter through the Representatives specifically for inclusion in the documents referred to in the foregoing indemnity. This indemnity agreement will be in addition to any liability which any Underwriter may otherwise have. The Company acknowledges that the statements set forth in the last paragraph of the cover page regarding delivery of the Securities, and, under the heading "Underwriting", (i) the eighth, ninth and tenth paragraphs, related to stabilization, syndicate covering transactions and penalty bids and (ii) the sentences related to concessions and reallowances and the Prospectus constitute the only information furnished in writing by or on behalf of the several Underwriters for inclusion in any Preliminary Prospectus or the Prospectus.

(c) Promptly after receipt by an indemnified party under this Section 8 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 8, notify the indemnifying party in writing of the commencement thereof; but the failure so to notify the indemnifying party (i) will not relieve it from liability under paragraph (a) or (b) above unless and to the extent it did not otherwise learn of such action and such failure results in the forfeiture by the indemnifying party of substantial rights and defenses and (ii) will not, in any event, relieve the indemnifying party from any obligations to any indemnified party other than the indemnification obligation provided in paragraph (a) or (b) above. The indemnifying party shall be entitled to appoint counsel of the indemnifying party's choice at the indemnifying party's expense to represent the indemnified party in any action for which indemnification is sought (in which case the indemnifying party shall not thereafter be responsible for the fees and expenses of any separate counsel retained by the indemnified party or parties except as set forth below); PROVIDED, HOWEVER, that such counsel shall be satisfactory to the indemnified party. Notwithstanding the indemnifying party's election to appoint counsel to represent the indemnified party in an action, the indemnified party shall have the right to employ separate counsel (including local counsel), and the indemnifying party shall bear the reasonable fees, costs and expenses of such separate counsel if (i) the use of counsel chosen by the indemnifying party to represent the indemnified party would present such counsel with a conflict of interest, (ii) the actual or potential defendants in, or targets of, any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that there may be legal defenses

available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party, (iii) the indemnifying party shall not have employed counsel satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of the institution of such action or (iv) the indemnifying party shall authorize the indemnified party to employ separate counsel at the expense of the indemnifying party. An indemnifying party will not, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any pending or threatened claim, action, suit or proceeding in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified parties are actual or potential parties to such claim or action) unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising out of such claim, action, suit or proceeding.

(d) In the event that the indemnity provided in paragraph (a) or (b) of this Section 8 is unavailable to or insufficient to hold harmless an indemnified party for any reason, the Company and the Underwriters severally agree to contribute to the aggregate losses, claims, damages and liabilities (including legal or other expenses reasonably incurred in connection with investigating or defending same) (collectively "Losses") to which the Company and one or more of the Underwriters may be subject in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and by the Underwriters on the other from the offering of the Securities; PROVIDED, HOWEVER, that in no case shall any Underwriter (except as may be provided in any agreement among underwriters relating to the offering of the Securities) be responsible for any amount in excess of the underwriting discount or commission applicable to the Securities purchased by such Underwriter hereunder. If the allocation provided by the immediately preceding sentence is unavailable for any reason, the Company and the Underwriters severally shall contribute in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and of the Underwriters on the other in connection with the statements or omissions which resulted in such Losses as well as any other relevant equitable considerations. Benefits received by the Company shall be deemed to be equal to the total net proceeds from the offering (before deducting expenses) received by it, and benefits received by the Underwriters shall be deemed to be equal to the total underwriting discounts and commissions, in each case as set forth on the cover page of the Prospectus. Relative fault

shall be determined by reference to, among other things, whether any untrue or any alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information provided by the Company on the one hand or the Underwriters on the other, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contribution were determined by pro rata allocation or any other method of allocation which does not take account of the equitable considerations referred to above. Notwithstanding the provisions of this paragraph (d), no person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 8, each person who controls an Underwriter within the meaning of either the Act or the Exchange Act and each director, officer, employee and agent of an Underwriter shall have the same rights to contribution as such Underwriter, and each person who controls the Company within the meaning of either the Act or the Exchange Act, each officer of the Company who shall have signed the Registration Statement and each director of the Company shall have the same rights to contribution as the Company, subject in each case to the applicable terms and conditions of this paragraph (d).

9. DEFAULT BY AN UNDERWRITER. If any one or more Underwriters shall fail to purchase and pay for any of the Securities agreed to be purchased by such Underwriter or Underwriters hereunder and such failure to purchase shall constitute a default in the performance of its or their obligations under this Agreement, the remaining Underwriters shall be obligated severally to take up and pay for (in the respective proportions which the amount of Securities set forth opposite their names in Schedule I hereto bears to the aggregate amount of Securities set forth opposite the names of all the remaining Underwriters) the Securities which the defaulting Underwriter or Underwriters agreed but failed to purchase; PROVIDED, HOWEVER, that in the event that the aggregate amount of Securities which the defaulting Underwriter or Underwriters agreed but failed to purchase shall exceed 10% of the aggregate amount of Securities set forth in Schedule I hereto, the remaining Underwriters shall have the right to purchase all, but shall not be under any obligation to purchase any, of the Securities, and if such nondefaulting Underwriters do not purchase all the Securities, this Agreement will terminate without liability to any nondefaulting Underwriter or the Company. In the event of a default by any Underwriter as set forth in this Section 9, the Closing Date

shall be postponed for such period, not exceeding five Business Days, as the Representatives shall determine in order that the required changes in the Registration Statement and the Prospectus or in any other documents or arrangements may be effected. Nothing contained in this Agreement shall relieve any defaulting Underwriter of its liability, if any, to the Company and any nondefaulting Underwriter for damages occasioned by its default hereunder.

10. TERMINATION. This Agreement shall be subject to termination in the absolute discretion of the Representatives, by notice given to the Company prior to delivery of and payment for the Securities, if at any time prior to such time (i) trading in the Company's Common Stock shall have been suspended by the Commission or the Nasdaq National Market or trading in securities generally on the New York Stock Exchange or the Nasdaq National Market shall have been suspended or limited or minimum prices shall have been established on such Exchange or National Market, (ii) a banking moratorium shall have been declared either by federal or New York State authorities or (iii) there shall have occurred any outbreak or escalation of hostilities, declaration by the United States of a national emergency or war or other calamity or crisis the effect of which on financial markets is such as to make it, in the sole judgment of the Representatives, impractical or inadvisable to proceed with the offering or delivery of the Securities as contemplated by the Prospectus (exclusive of any supplement thereto).

11. REPRESENTATIONS AND INDEMNITIES TO SURVIVE. The respective agreements, representations, warranties, indemnities and other statements of the Company or its officers and of the Underwriters set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation made by or on behalf of any Underwriter or the Company or any of the officers, directors, employees, agents or controlling persons referred to in Section 8 hereof, and will survive delivery of and payment for the Securities. The provisions of Sections 7 and 8 hereof shall survive the termination or cancellation of this Agreement.

12. NOTICES. All communications hereunder will be in writing and effective only on receipt, and, if sent to the Representatives, will be mailed, delivered or telefaxed to the Salomon Smith Barney Inc. General Counsel (fax no.: (212) 816-7912) and confirmed to the General Counsel, Salomon Smith Barney Inc., 388 Greenwich Street, New York, New York, 10013, Attention: General Counsel; or, if sent to the Company, will be mailed, delivered or telefaxed to Ronald Gray,

BioCryst Pharmaceuticals, Inc. Chief Financial Officer (fax no. (205) 444-4640 and confirmed to it at 2190 Parkway Lake Drive, Birmingham, AL 35255, attention of Ronald Gray.

13. SUCCESSORS. This Agreement will inure to the benefit of and be binding upon the parties hereto and their respective successors and the officers, directors, employees, agents and controlling persons referred to in Section 8 hereof, and no other person will have any right or obligation hereunder.

14. APPLICABLE LAW. This Agreement will be governed by and construed in accordance with the laws of the State of New York applicable to contracts made and to be performed within the State of New York.

15. COUNTERPARTS. This Agreement may be signed in one or more counterparts, each of which shall constitute an original and all of which together shall constitute one and the same agreement.

16. HEADINGS. The section headings used herein are for convenience only and shall not affect the construction hereof.

17. DEFINITIONS. The terms which follow, when used in this Agreement, shall have the meanings indicated.

"Act" shall mean the Securities Act of 1933, as amended, and the rules and regulations of the Commission promulgated thereunder.

"Business Day" shall mean any day other than a Saturday, a Sunday or a legal holiday or a day on which banking institutions or trust companies are authorized or obligated by law to close in New York City or Birmingham, Alabama.

"Commission" shall mean the Securities and Exchange Commission.

"Effective Date" shall mean each date and time that the Registration Statement, any post-effective amendment or amendments thereto and any Rule 462(b) Registration Statement became or become effective.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission promulgated thereunder.

"Execution Time" shall mean the date and time that this Agreement is executed and delivered by the parties hereto.

"Preliminary Prospectus" shall mean any preliminary prospectus referred to in paragraph 1(a) above and any preliminary prospectus included in the Registration Statement at the Effective Date that omits Rule 430A Information.

"Prospectus" shall mean the prospectus relating to the Securities that is first filed pursuant to Rule 424(b) after the Execution Time or, if no filing pursuant to Rule 424(b) is required, shall mean the form of final prospectus relating to the Securities included in the Registration Statement at the Effective Date.

"Registration Statement" shall mean the registration statement referred to in paragraph 1(a) above, including exhibits and financial statements, as amended at the Execution Time (or, if not effective at the Execution Time, in the form in which it shall become effective) and, in the event any post-effective amendment thereto or any Rule 462(b) Registration Statement becomes effective prior to the Closing Date, shall also mean such registration statement as so amended or such Rule 462(b) Registration Statement, as the case may be. Such term shall include any Rule 430A Information deemed to be included therein at the Effective Date as provided by Rule 430A.

"Rule 424", "Rule 430A" and "Rule 462" refer to such rules under the Act.

"Rule 430A Information" shall mean information with respect to the Securities and the offering thereof permitted to be omitted from the Registration Statement when it becomes effective pursuant to Rule 430A.

"Rule 462(b) Registration Statement" shall mean a registration statement and any amendments thereto filed pursuant to Rule 462(b) relating to the offering covered by the registration statement referred to in Section 1(a) hereof.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to us the

enclosed duplicate hereof, whereupon this letter and your acceptance shall represent a binding agreement among the Company and the several Underwriters.

Very truly yours,

BioCryst Pharmaceuticals, Inc.

By: _____
Name: _____
Title: _____

The foregoing Agreement is hereby confirmed and accepted as of the date first above written.

Salomon Smith Barney Inc. and
Hambrecht & Quist LLC
Raymond James & Associates, Inc.

By: Salomon Smith Barney Inc.

By: _____
Name: _____
Title: _____

For themselves and the other several Underwriters, if any, named in Schedule I to the foregoing Agreement.

SCHEDULE I

UNDERWRITERS	Number of Underwritten Securities to be PURCHASED
Salomon Smith Barney Inc.	
Hambrecht & Quist	
Raymond James & Associates, Inc.	
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Total	

SCHEDULE II

1. Johnson & Johnson Development Corporation
2. Claude J. Bennett
3. Charles E. Bugg
4. William W. Featheringill
5. Edwin A. Gee
6. Ronald E. Gray
7. Zola P. Horovitz
8. John A. Montgomery
9. Joseph H. Sherrill Jr.
10. William M. Spencer III.
11. Randolph C. Steer
12. John R. Uhrin

Form of Lock-up Letter

BIOCRYST PHARMACEUTICALS, INC.

PUBLIC OFFERING OF COMMON STOCK

Salomon Smith Barney Inc.
Hambrecht & Quist LLC
Raymond James & Associates, Inc.
As Representatives of the several Underwriters,
c/o Salomon Smith Barney Inc.
388 Greenwich Street
New York, NY 10013

Ladies and Gentlemen:

This letter is being delivered to you in connection with the proposed Underwriting Agreement (the "Underwriting Agreement"), between BIOCRYST PHARMACEUTICALS, INC., a Delaware corporation (the "Company"), and each of you as representatives of a group of Underwriters named therein, relating to an underwritten public offering of Common Stock, \$0.01 par value (the "Common Stock"), of the Company.

In order to induce you and the other Underwriters to enter into the Underwriting Agreement, the undersigned will not, without the prior written consent of Salomon Smith Barney Inc., offer, sell, contract to sell, pledge or otherwise dispose of, (or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise) by the Company or any affiliate of the Company or any person in privity with the Company or any affiliate of the Company) directly or indirectly, including the filing (or participation in the filing of) a registration statement with the Securities and Exchange Commission in respect of, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Securities and Exchange Commission promulgated thereunder with respect to, any shares of capital stock of the Company or any securities convertible into or exercisable or exchangeable for such capital stock, or publicly announce an intention to effect any such transaction, for a period of ninety (90) days after the date of this Agreement, other than (i) as a bona fide gift or gifts, provided the donee or donees thereof agree to be bound by this agreement, (ii) as a distribution to limited partners or shareholders of the undersigned, provided that the distributees thereof agree in writing to be bound by the terms of this agreement or (iii) with the prior written consent of Salomon Smith Barney.

Furthermore, the undersigned hereby agrees and consents to the entry of stop transfer instructions with the Company's transfer agent against the transfer of any shares of capital stock held by the undersigned except in compliance with this agreement.

If for any reason the Underwriting Agreement shall be terminated prior to the Closing Date (as defined in the Underwriting Agreement) or in the event that the Registration Statement shall not have been declared effective on or before December 31, 1999 the agreement set forth above shall likewise be terminated.

Yours very truly,

Very truly yours,

(signature)

Name: -----

Address: -----

Accepted as of the date first set forth above:
Salomon Smith Barney Inc.
Hambrecht & Quist LLC
Raymond James & Associates, Inc.
As Representatives of the Several Underwriters

Salomon Smith Barney Inc.

By: -----
(authorized signatory)

The Company requests that this Lock-Up Agreement be completed and delivered to
Company counsel, Brobeck, Phleger & Harrison LLP, 370 Interlocken Boulevard,
Suite 500, Broomfield, CO 80021, Attn: Patricia A.
Elias, Esq.

October 22, 1999

BioCryst Pharmaceuticals, Inc.
2190 Parkway Lake Drive
Birmingham, AL 35244

Re: BioCryst Registration Statement on Form S-3
for Delaware Shares of Common Stock

Ladies and Gentlemen:

We have acted as counsel to BioCryst Pharmaceuticals, Inc., a Delaware corporation (the "Company"), in connection with the proposed issuance and sale by the Company of up to 2,300,000 shares of the Company's common stock, par value \$.01, (the "Shares") pursuant to the Company's Registration Statement No. 333-87669 on Form S-3 (the "Registration Statement") filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Act").

This opinion is being furnished in accordance with the requirements of Item 16 of Form S-3 and Item 601(b)(5)(i) of Regulation S-K.

We have reviewed the Company's charter documents and the corporate proceedings taken by the Company in connection with the issuance and sale of the Shares. Based on such review, we are of the opinion that the Shares have been duly authorized, and if, as and when issued in accordance with the Registration Statement and the related prospectus (as amended and supplemented through the date of issuance) will be legally issued, fully paid and nonassessable.

We consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement and to the reference to this firm under the caption "Legal Matters" in the prospectus which is part of the Registration Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Act, the rules and regulations of the Securities and Exchange Commission promulgated thereunder, or Item 509 of Regulation S-K.

This opinion letter is rendered as of the date first written above and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein. Our opinion is expressly limited to the matters set forth above and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company or the Shares.

Very truly yours,

/s/ Brobeck, Phleger & Harrison LLP

BROBECK, PHLEGER & HARRISON LLP

CONSENT OF ERNST & YOUNG LLP
INDEPENDENT AUDITORS

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3, No. 333-87669) and the related Prospectus of BioCryst Pharmaceuticals, Inc. for the registration of 2,300,000 shares of its common stock and to the incorporation by reference therein of our report dated January 15, 1999, with respect to the financial statements of BioCryst Pharmaceuticals, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 1998, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Birmingham, Alabama
October 22, 1999