BIOCRYST PHARMACEUTICALS INC
Form S-3
September 02, 2005

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**As filed with the United States Securities and Exchange Commission on September 2, 2005**
**Registration No. 333-**

**SECURITIES AND EXCHANGE COMMISSION**
**Washington, D.C. 20549**

**Form S-3**
**REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

**BioCryst Pharmaceuticals, Inc.**
*(Exact name of registrant as specified in its charter)*

| **Delaware** | **62-1413174** |
|---|---|
| *(State or other jurisdiction of incorporation or organization)* | *(I.R.S. Employer Identification No.)* |

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

***With a copy to:***
**Richard R. Plumridge, Esq.**
**Jennifer D Alessandro, Esq.**
**Holme Roberts & Owen LLP**
**1700 Lincoln Street, Suite 4100**
**Denver, Colorado 80203**
**(303) 861-7000**

**Approximate date of commencement of proposed sale to the public:** From time to time after the effective date of this Registration Statement, as determined by market conditions.

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

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, please check the following box. þ

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

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. o

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

**CALCULATION OF REGISTRATION FEE**

| Title of Each Class of Securities to Be Registered(1) | Proposed Maximum Aggregate Offering Price(2) | Amount of Registration Fee |
|---|---|---|
| Common Stock, $0.01 par value per share(1)(2) | $85,000,000.00 | $10,004.50 |

(1) Calculated pursuant to Rule 457(o) under the Securities Act. There is being registered hereunder an indeterminate number of shares of common stock of the registrant as may be sold from time to time by the registrant. Pursuant to Rule 416 under the Securities Act, the shares being registered hereunder include such indeterminate number of shares of common stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions. The aggregate offering price for all shares of common stock that the registrant may sell from time to time pursuant to this registration statement will not exceed $85,000,000. The aggregate amount of the registrant s common stock registered hereunder that may be sold in at the market offerings for the account of the registrant is limited to that which is permissible under Rule 415(a)(4) under the Securities Act of 1933, as amended.

(2) Each share of Common Stock includes the right to purchase one one-thousandth of a share of our Series B Junior Participating Preferred Stock.

**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, as amended, or until this registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.**

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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 we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

**SUBJECT TO COMPLETION, SEPTEMBER 2, 2005**

**PROSPECTUS**

**$85,000,000**
**Common Stock**

We may sell shares of common stock from time to time in one or more offerings and the total offering price, in the aggregate, will not exceed $85,000,000. This means:

we will provide a prospectus supplement each time we issue common stock; and

the prospectus supplement will inform you about the specific terms of that offering and may also add, update or change information contained in this document.

You should carefully read this prospectus, the information incorporated by reference in this prospectus and any prospectus supplement before you decide to invest.

Our common stock, par value $0.01 per share, trades on The Nasdaq National Market under the symbol BCRX. On September 1, 2005, the reported last sale price of our common stock on The Nasdaq National Market was $8.70 per share.

**Investing in our common stock involves risks. See Risk Factors beginning on page 4 of this prospectus.**

The securities may be sold by us to or through underwriters or dealers, directly to purchasers or through agents designated from time to time. For additional information on the methods of sale, you should refer to the section entitled Plan of Distribution in this prospectus. If any underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such underwriters and any applicable discounts or commissions and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement. This prospectus may not be used to sell any of the common stock unless accompanied by a prospectus supplement.

**The Securities and Exchange Commission and state securities regulators have not approved or disapproved these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

The date of this prospectus is , 2005.

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**You should rely only on the information contained or incorporated by reference into this prospectus or any applicable prospectus supplement. We have not authorized anyone to provide you with different information. We are not making an offer of the common stock to be sold under this prospectus in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of the document, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.**

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## About This Prospectus

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a shelf registration process. Under this shelf registration process, we may sell common stock in one or more offerings up to a total dollar amount of $85,000,000. Each time we sell any common stock under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also add, update or change in a prospectus supplement any of the information contained in this prospectus or in documents we have incorporated by reference into this prospectus. This prospectus, together with the applicable prospectus supplements and the documents incorporated by reference into this prospectus, includes all material information relating to this offering. You should carefully read both this prospectus and the applicable prospectus supplement together with the additional information described under Where You Can Find More Information before buying our common stock in this offering.

## About BioCryst Pharmaceuticals, Inc.

BioCryst Pharmaceuticals, Inc. is a biotechnology company focused on designing, optimizing and developing novel small molecule pharmaceuticals that block key enzymes essential for cancer, cardiovascular diseases, autoimmune diseases and viral infections. Our most advanced drug candidate, Fodosine™ ( forodesine hydrochloride ), is an investigational purine nucleoside phosphorylase ( PNP ) inhibitor being tested in clinical trials as a treatment option for patients suffering from certain T-cell and B-cell cancers.

BioCryst is a Delaware corporation originally founded in 1986. Our principal offices are located at 2190 Parkway Lake Drive, Birmingham, Alabama 35244, and our telephone number is (205) 444-4600. Our web site is located at http://www.biocryst.com. The information on our web site is not incorporated by reference into this prospectus.

### Our Business Strategy

Our business strategy is to use structure-based drug design technologies to develop innovative, small-molecule pharmaceuticals to treat a variety of diseases and disorders. We focus our drug development efforts on building potent, selective inhibitors of enzymes associated with targeted diseases. Enzymes are proteins that cause or enable biological reactions necessary for the progression of the disease or disorder. The specific enzymes on which we focus are called enzyme targets. The Company aims to design compounds that will inhibit an enzyme target by fitting the active site of a particular enzyme. Inhibition means interfering with the functioning of an enzyme target, thereby stopping or slowing the progression of the disease or disorder. The principal elements of our strategy are:

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

- serve important functions in disease pathways;
- have known animal or cell-based models that would be indicative of results in humans;
- address large potential markets and significant unmet medical needs, including pursuing niche markets where the results have potential application to broader markets and needs;
- have multiple potential clinical applications; and
- offer rapid development and commercialization opportunities.

*Focus on High Value-Added Structure-Based Drug Design Technologies.* We focus our drug discovery activities and expenditures on applications of structure-based drug design technologies to design and develop drug candidates. Structure-based drug design is a process by which we design a drug candidate through detailed analysis of the enzyme target, which the drug candidate must inhibit in

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order to stop the progression of the disease or disorder. We believe that structure-based drug design is a powerful tool for efficient development of small-molecule drug candidates that have the potential to be safe, effective and relatively inexpensive to manufacture. Our structure-based drug design technologies typically allow us to design and synthesize multiple drug candidates that inhibit the same enzyme target. We believe this strategy can lead to broad patent protection and enhance the competitive advantages of our compounds.

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

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

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

*Developing Drug Product Candidates or Licensing Them to Other Parties.* We generally plan to advance drug candidates through initial and/or early-stage drug development. For larger disease indications requiring complex clinical trials, our strategy is to license drug candidates to pharmaceutical or biotechnology partners for final development and global marketing. We believe partnerships are a good source of development payments, license fees, milestone payments and royalties. They also reduce the costs and risks, and increase the effectiveness, of late-stage product development, regulatory approval, manufacturing and marketing. We believe that focusing on discovery and early-stage drug development while benefiting from our partners proven development and commercialization expertise will reduce our internal expenses and allow us to have a larger number of drug candidates progress to late-stage drug development. However, after establishing a lead product candidate, we are willing to license that candidate during any stage of the development process we determine to be beneficial to the company and to the ultimate development and commercialization of that drug candidate. For some smaller niche disease indications markets, we may choose to complete development, manufacture, and where appropriate market and distribute any approved drugs ourselves, such as Fodosine[tm] for certain T-cell and B-cell cancers.

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**Products in Development**

The following table summarizes BioCryst s active development projects as of August 31, 2005:

| Program and Candidate Disease Category/Indication | Delivery Form | Development Stage | Worldwide Rights |
|---|---|---|---|
| **PNP Inhibitor** (Fodosine[tm], BCX-1777) Oncology | Intravenous | Phase II | BioCryst |
| | Oral | Phase II | BioCryst |
| **PNP Inhibitor** (BCX-4208) Autoimmune diseases | Oral | Phase I | BioCryst |
| **Hepatitis C Polymerase Inhibitors** (BCX-4678) Viral | Oral | Preclinical | BioCryst |
| **Neuraminidase Inhibitor** (Peramivir) Viral | IV/IM | Preclinical | BioCryst |
| **Tissue Factor/ Factor VIIa Inhibitors** Cardiovascular/ Oncology | Oral | Discovery | BioCryst |

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## Risk Factors

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

### Risks Relating to Our Business

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

Since our inception in 1986, we have not been profitable. We expect to incur additional losses for the foreseeable future, and our losses could increase as our research and development efforts progress. As of June 30, 2005, our accumulated deficit was approximately $137.1 million. To become profitable, we must successfully develop drug product candidates, enter into profitable agreements with other parties and our product candidates must receive regulatory approval. We or these other parties must then successfully manufacture and market our product candidates. It could be several years, if ever, before we receive royalties from any future license agreements or revenues directly from product sales.

Because of the numerous risks and uncertainties associated with developing our product candidates and their potential for commercialization, we are unable to predict the extent of any future losses or when we will become profitable, if at all. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. If we are unable to achieve and sustain profitability, the market value of our common stock will likely decline.

***If we fail to obtain additional financing, we may be unable to complete the development and commercialization of our product candidates or continue our research and development programs.***

To date, we have financed our operations primarily from sale of our equity securities and, to a lesser extent, revenues from collaborations and interest. In 2004, our operations consumed approximately $1.5 million per month and the run rate at the end of the second quarter 2005 was approximately $2.0 million. We expect that our monthly cash used by operations will continue to increase for the next several years. During the second half of 2005, we plan to both expand our existing clinical programs and initiate clinical programs for several new disease indications. These additional trials and the related manufacturing, personnel resources and testing required to support these studies will consume significant capital resources and will increase our expenses and our net loss.

As of June 30, 2005, we had $40.0 million in cash, cash equivalents and securities. We raised cash totaling $23.9 million gross (approximately $22.7 million net of expenses) through the sale of equity during February 2005 to provide the resources necessary to continue the development of our existing programs, while prudently maintaining our cash position. We expect our monthly burn rate to increase to approximately $2.5 million during the second half of 2005, as our lead candidates advance through the clinical trials currently ongoing and planned for 2005. This monthly burn rate could vary significantly depending on many factors, including our ability to raise additional capital, our ability to establish partnerships for our drug product candidates, the progress of our current and proposed clinical trials for Fodosine™, BCX-4208 and BCX-4678, and the progression of our other programs. 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;

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our ability to establish additional collaborative relationships;

our ability to negotiate favorable development and marketing alliances for our drug product candidates;

the magnitude of our research and development programs;

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

competitive and technological advances;

the time and costs involved in obtaining regulatory approvals;

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

our dependence on others for development and commercialization of our product candidates; and

successful commercialization of our products consistent with our licensing strategy.

We will be required to raise additional capital to complete the development and commercialization of our current product candidates. Additional funding, whether through additional sales of securities or collaborative or other arrangements with corporate partners or from other sources, may not be available when needed or on terms acceptable to us. The issuance of preferred or common stock or convertible securities, with terms and prices significantly more favorable than those of the currently outstanding common stock, could have the effect of diluting or adversely affecting the holdings or rights of our existing stockholders. In addition, collaborative arrangements may require us to transfer certain material rights to such corporate partners. Insufficient funds may require us to delay, scale-back or eliminate certain of our research and development programs.

***We have not commercialized any products or technologies and our future revenue generation is uncertain.***

We have not yet commercialized any products or technologies, and we may never be able to do so. Our revenue from collaborative agreements is dependent upon the status of our preclinical and clinical programs. If we fail to advance these programs to the point of being able to enter into successful collaborations, we will not receive any future milestone or other collaborative payments.

Any future revenue directly from product sales would depend on our ability to successfully complete clinical studies, obtain regulatory approvals, manufacture, market and commercialize any approved drugs.

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

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

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

licensing or design of enzyme inhibitors for development as drug product candidates;

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

management of our clinical trials, including medical monitoring and data management;

execution of additional toxicology studies that may be required to obtain approval for our product candidates;

manufacturing the starting materials required to formulate our drug compounds;

management of our regulatory function; and

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

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Our failure to engage in successful collaborations at any one of these stages would greatly impact our business. If we do not license enzyme targets or inhibitors from academic institutions or from other biotechnology companies on acceptable terms, our product development efforts would suffer. Similarly, if the contract research organizations that conduct our initial or late-stage clinical trials or manage our regulatory function breached their obligations to us, this would delay or prevent the development of our product candidates.

***If we fail to establish collaborative relationships to commercialize certain of our drug product candidates or if any collaborator terminates or fails to perform its obligations under agreements with us, the commercialization of our product candidates could be delayed or terminated.***

A key aspect of our business strategy is to enter into successful collaborative arrangements with pharmaceutical companies, research institutions, the United States government and universities for the late-stage clinical development, regulatory approval, marketing, domestic and international sales and distribution of our drug product candidates. Our general strategy is to rely upon other parties for all of these steps so that we can focus exclusively on the key areas of our expertise. For some smaller niche markets, we may perform these steps ourselves and outsource those functions where we do not have the internal expertise.

Currently, we have no established collaborative relationships with pharmaceutical companies or government agencies. The process of establishing collaborative relationships is difficult, time-consuming and involves significant uncertainty. Moreover, even if we do establish collaborative relationships, heavy reliance upon third parties for these critical functions presents several risks, including:

our collaborators may seek to renegotiate or terminate their relationships with us due to unsatisfactory clinical results, a change in business strategy, a change of control or other reasons;

our contracts for collaborative arrangements may expire;

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

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

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

our partners may not comply with applicable government regulatory requirements.

If any collaborator fails to fulfill its responsibilities in a timely manner, or at all, our commercialization efforts related to that collaboration could be delayed or terminated, or it may be necessary for us to assume responsibility for activities that would otherwise have been the responsibility of our collaborator. If we are unable to establish and maintain collaborative relationships on acceptable terms, we may have to delay or discontinue further development of one or more of our product candidates, undertake commercialization activities at our own expense or find alternative sources of funding. Any delay in the development or commercialization of our compounds would severely affect our business, because if our compounds do not reach the market in a timely manner, or at all, we may never receive any milestone, product or royalty payments.

***Because we have limited manufacturing experience, we depend on third-party manufacturers to manufacture our drug product candidates and the materials for our product candidates. If we cannot rely on third-party manufacturers, we will be required to incur significant costs and potential delays in finding new third-party manufacturers.***

We have limited manufacturing experience and only a small scale manufacturing facility. We currently rely upon third-party manufacturers to manufacture the materials required for our drug product candidates and most of the preclinical and clinical quantities of our product candidates. We depend on these third-party manufacturers to perform their obligations in a timely manner and in accordance with applicable governmen-

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tal regulations. Our third-party manufacturers may encounter difficulties with meeting our requirements, including problems involving:

inconsistent production yields;

interruption of the delivery of materials required for the manufacturing process;

scheduling of plant time with other vendors or unexpected equipment failure;

poor quality control and assurance or inadequate process controls; and

lack of compliance with regulations and specifications set forth by the FDA or other foreign regulatory agencies.

These contract manufacturers may not be able to manufacture the materials required or our drug product candidates at a cost or in quantities necessary to make them commercially viable. We also have no control over whether third-party manufacturers breach their agreements with us or whether they may terminate or decline to renew agreements with us. To date, our third party manufacturers have met our manufacturing requirements, but we cannot assure you that they will continue to do so. Furthermore, changes in the manufacturing process or procedure, including a change in the location where the drug is manufactured or a change of a third-party manufacturer, may require prior review and approval in accordance with the FDA s current Good Manufacturing Practices, or cGMPs, and comparable foreign requirements. This review may be costly and time-consuming and could delay or prevent the launch of a product. The FDA or similar foreign regulatory agencies at any time may also implement new standards, or change their interpretation and enforcement of existing standards for manufacture, packaging or testing of products. If we or our contract manufacturers are unable to comply, we or they may be subject to regulatory action, civil actions or penalties.

If we are unable to enter into agreements with additional manufacturers on commercially reasonable terms, or if there is poor manufacturing performance on the part of our third party manufacturers, we may not be able to complete development of, or market, our product candidates.

***We may be unable to establish sales, marketing and distribution capabilities necessary to successfully commercialize products we may successfully develop.***

We currently have no marketing capability and no direct or third-party sales or distribution capabilities. If we successfully develop a drug product candidate and decide to commercialize it ourselves rather than relying on third parties, as we are considering doing in the United States for Fodosine™, we may be unable to establish marketing, sales and distribution capabilities necessary to commercialize and gain market acceptance for that product.

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

To receive the regulatory approvals necessary for the sale of our product candidates, we or our licensees must demonstrate through preclinical studies and clinical trials that each product candidate is safe and effective. If we or our licensees are unable to demonstrate that our product candidates are safe and effective, our product candidates will not receive regulatory approval and will not be marketed, which would result in a complete absence of product related revenue. The clinical trial process is complex and uncertain. Because of the cost and duration of clinical trials, we may decide to discontinue development of product candidates that are either unlikely to show good results in the trials or unlikely to help advance a product to the point of a meaningful collaboration. Positive results from preclinical studies and early clinical trials do not ensure positive results in clinical trials designed to permit application for regulatory approval, called pivotal clinical trials. We may suffer significant setbacks in pivotal clinical trials, even after earlier clinical trials show promising results. Any of our product candidates may produce undesirable side effects in humans. These side effects could cause us or regulatory authorities to interrupt, delay or halt clinical trials of a product candidate. These side effects could also result in the FDA or foreign regulatory authorities refusing to approve the product candidate for any targeted indications. We, our licensees, the FDA or foreign regulatory authorities

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may suspend or terminate clinical trials at any time if we or they believe the trial participants face unacceptable health risks. Clinical trials may fail to demonstrate that our product candidates are safe or effective.

We are seeking a special protocol assessment, or SPA, of the clinical trial protocol for the proposed Phase IIb clinical trial of Fodosine[tm] in T-cell leukemia. A special protocol assessment is an agreement between an applicant and the FDA on the design and the size of clinical trials that is intended to form the basis of a New Drug Application. In connection with an SPA, an applicant may decide, or the FDA may require the applicant, to modify the proposed protocol by, for example, changing the proposed primary endpoint, the size of the study or otherwise, which may result in a delay in the initiation or completion of the clinical trials that are the subject of the SPA. These changes could arise from a change in the standard of care for the proposed indication or other aspects of the protocol for the proposed clinical trials. If the FDA and an applicant reach an agreement on an SPA, the SPA cannot be changed after the clinical trial begins, except in limited circumstances such as a change in the science or clinical knowledge about the conditions being studied. Any significant change to the protocols for a clinical trial subject to an SPA would require prior FDA approval, which could delay implementation of such a change and continuation and completion of the related clinical trial.

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

***If we or our licensees do not obtain and maintain governmental approvals for our products under development, we or our partners will not be able to sell these potential products, which would significantly harm our business because we will receive no revenue.***

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

The FDA regulates, among other things, the record keeping and storage of data pertaining to potential pharmaceutical products. We currently store most of our preclinical research data at our facility. While we do store duplicate copies of most of our clinical data offsite, we could lose important preclinical data if our facility incurs damage. If we get approval to market our potential products, whether in the United States or internationally, we will continue to be subject to extensive regulatory requirements. These requirements are wide ranging and govern, among other things:

adverse drug experience reporting regulations;

product promotion;

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product manufacturing, including good manufacturing practice requirements; and

product changes or modifications.

Our failure to comply with existing or future regulatory requirements, or our loss of, or changes to, previously obtained approvals, could have a material adverse effect on our business because we will not receive product or royalty revenues if we or our licensees do not receive approval of our products for marketing.

In June 1995, we notified the FDA that we submitted incorrect data for our Phase II studies of BCX-34 applied to the skin for CTCL and psoriasis. The FDA inspected us in November 1995 and issued us a List of Inspectional Observations, Form FDA 483, which cited our failure to follow good clinical practices. The FDA also inspected us in June 1996. The focus was on the two 1995 Phase II dose-ranging studies of topical BCX-34 for the treatment of CTCL and psoriasis. As a result of the investigation, the FDA issued us a Form FDA 483, which cited our failure to follow good clinical practices. We are no longer developing BCX-34; however, as a consequence of these two investigations, our ongoing and future clinical studies may receive increased scrutiny, which may delay the regulatory review process.

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

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

our clinical evidence of safety and efficacy;

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

their safety, availability and effectiveness relative to alternative treatments;

the actual and potential side effects or other reactions;

reimbursement policies of government and third-party payers; and

the effectiveness of marketing and distribution support for our product candidates.

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

***We face intense competition, and if we are unable to compete effectively, the demand for our products, if any, may be reduced.***

The biotechnology and pharmaceutical industries are highly competitive and subject to rapid and substantial technological change. We face, and will continue to face, competition in the licensing of desirable disease targets, licensing of desirable drug product candidates, and development and marketing of our product candidates from academic institutions, government agencies, research institutions and biotechnology and pharmaceutical companies. Competition may also arise from, among other things:

other drug development technologies;

methods of preventing or reducing the incidence of disease, including vaccines; and

new small molecule or other classes of therapeutic agents.

Developments by others may render our product candidates or technologies obsolete or noncompetitive.

We are performing research on or developing products for the treatment of several disorders including T-cell mediated disorders (T-cell cancers, psoriasis, and rheumatoid arthritis), cardiovascular, oncology, and

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hepatitis C, and there are a number of competitors to products in our research pipeline. If one or more of our competitors products or programs are successful, the market for our products may be reduced or eliminated.

Compared to us, many of our competitors and potential competitors have substantially greater:

- capital resources;
- research and development resources, including personnel and technology;
- regulatory experience;
- preclinical study and clinical testing experience;
- manufacturing and marketing experience; and
- production facilities.

Any of these competitive factors could reduce demand for our products.

***If we fail to adequately protect or enforce our intellectual property rights or secure rights to patents of others, the value of those rights would diminish.***

Our success will depend in part on our ability and the abilities of our collaborators to obtain patent protection for our products, methods, processes and other technologies we may license or develop, to preserve our trade secrets, and to operate without infringing the proprietary rights of third parties both domestically and abroad. The patent position of biotechnology companies is generally highly uncertain, involves complex legal and factual questions and has recently been the subject of much litigation. Neither the United States Patent and Trademark Office, or PTO, nor the courts have a consistent policy regarding the breadth of claims allowed or the degree of protection afforded under many biotechnology patents. The validity, enforceability and commercial value of these rights, therefore, is highly uncertain.

If we or our partners are unable to adequately protect or enforce our intellectual property rights for our products, methods, processes and other technologies, the value of the drug product candidates that we license to derive revenue would diminish. Additionally, if our products, methods, processes and other technologies infringe the proprietary rights of other parties, we could incur substantial costs. The U.S. Patent and Trademark Office has issued to us a number of U.S. patents for our various inventions and we have in-licensed several patents from various institutions. We have filed additional patent applications and provisional patent applications with the U.S. Patent and Trademark Office. We have filed a number of corresponding foreign patent applications and intend to file additional foreign and U.S. patent applications, as appropriate. We cannot assure you as to:

- the degree and range of protection any patents will afford against competitors with similar products;
- if and when patents will issue; or
- whether or not others will obtain patents claiming aspects similar to those covered by our patent applications.

If the U.S. Patent and Trademark Office upholds patents issued to others or if the U.S. Patent and Trademark Office grants patent applications filed by others, we may have to:

- obtain licenses or redesign our products or processes to avoid infringement;
- stop using the subject matter claimed in those patents; or
- pay damages.

We may initiate, or others may bring against us, litigation or administrative proceedings related to intellectual property rights, including proceedings before the U.S. Patent and Trademark Office. Any judgment adverse to us in any litigation or other proceeding arising in connection with a patent or patent application could materially and

adversely affect our business, financial condition and results of operations. In addition, the costs of any such proceeding may be substantial whether or not we are successful.

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Our success is also dependent upon the skills, knowledge and experience, none of which is patentable, of our scientific and technical personnel. To help protect our rights, we require all employees, consultants, advisors and collaborators to enter into confidentiality agreements that prohibit the disclosure of confidential information to anyone outside of our company and require disclosure and assignment to us of their ideas, developments, discoveries and inventions. These agreements may not provide adequate protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information, and if any of our proprietary information is disclosed, our business will suffer because our revenues depend upon our ability to license our technology and any such events would significantly impair the value of such a license.

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

We are highly dependent upon our senior management and scientific team, the loss of whose services might impede the achievement of our development and commercial objectives. Competition for key personnel with the experience that we require is intense and is expected to continue to increase. Our inability to attract and retain the required number of skilled and experienced management, operational and scientific personnel, will harm our business because we rely upon these personnel for many critical functions of our business. In addition, we rely on members of our scientific advisory board and consultants to assist us in formulating our research and development strategy. All of the members of the scientific advisory board and all of our consultants are otherwise employed and each such member or consultant may have commitments to other entities that may limit their availability to us.

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

The lack of reimbursement for the use of our product candidates by hospitals, clinics, patients or doctors will harm our business. Medicare, Medicaid, health maintenance organizations and other third-party payers may not authorize or otherwise budget for the reimbursement of our products. Governmental and third-party payers are increasingly challenging the prices charged for medical products and services. We cannot be sure that third-party payers would view our product candidates as cost-effective, that reimbursement will be available to consumers or that reimbursement will be sufficient to allow our product candidates to be marketed on a competitive basis. Changes in reimbursement policies, or attempts to contain costs in the health care industry could limit or restrict reimbursement for our product candidates and would materially and adversely affect our business, because future product sales would decline and we would receive less product or royalty revenue.

***The recent Medicare prescription drug coverage legislation and future legislative or regulatory reform of the healthcare system may affect our ability to sell our products profitably.***

In the United States, there have been a number of legislative and regulatory proposals, at both the federal and state government levels, to change the healthcare system in ways that could affect our ability to sell our products profitably, if approved. For example, the Medicare Prescription Drug and Modernization Act of 2003, or MMA, will change the types of drugs covered by Medicare, and the methodology used to determine the price for such drugs. Further federal and state proposals and healthcare reforms are likely. Our business could be harmed by the MMA, by the possible effect of this legislation on amounts that private payors will pay and by other healthcare reforms that may be enacted or adopted in the future.

***There is a substantial risk of product liability claims in our business. If we are unable to obtain sufficient insurance, a product liability claim against us could adversely affect our business.***

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face even greater risks upon any commercialization by us of our product candidates. We have product liability insurance covering our clinical trials in the amount of $7 million, which we currently believe is adequate to cover any product liability exposure we may have. Clinical trial and product

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liability insurance is becoming increasingly expensive. As a result, we may be unable to obtain sufficient insurance or increase our existing coverage at a reasonable cost to protect us against losses that could have a material adverse effect on our business. An individual may bring a product liability claim against us if one of our products or product candidates causes, or is claimed to have caused, an injury or is found to be unsuitable for consumer use. Any product liability claim brought against us, with or without merit, could result in:

- liabilities that substantially exceed our product liability insurance, which we would then be required to pay from other sources, if available;
- an increase of our product liability insurance rates or the inability to maintain insurance coverage in the future on acceptable terms, or at all;
- withdrawal of clinical trial volunteers or patients;
- damage to our reputation and the reputation of our products, resulting in lower sales;
- regulatory investigations that could require costly recalls or product modifications;
- litigation costs; and
- the diversion of management s attention from managing our business.

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

Our drug development activities depend on the security, integrity and performance of the computer systems supporting them, and the failure of our computer systems could delay our drug development efforts. We currently store most of our preclinical and clinical data at our facility. Duplicate copies of most critical data are stored off-site in a bank vault. Any significant degradation or failure of our computer systems could cause us to inaccurately calculate or lose our data. Loss of data could result in significant delays in our drug development process and any system failure could harm our business and operations.

***If, because of our use of hazardous materials, we violate any environmental controls or regulations that apply to such materials, we may incur substantial costs and expenses in our remediation efforts.***

Our research and development involves the controlled use of hazardous materials, chemicals and various radioactive compounds. We are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and some waste products. Accidental contamination or injury from these materials could occur. In the event of an accident, we could be liable for any damages that result and any liabilities could exceed our resources. Compliance with environmental laws and regulations could require us to incur substantial unexpected costs, which would materially and adversely affect our results of operations.

**Risks Relating to Our Common Stock**

***Our stock price is likely to be highly volatile and the value of your investment could decline significantly.***

The market prices for securities of biotechnology companies in general have been highly volatile and may continue to be highly volatile in the future. Moreover, our stock price has fluctuated frequently, and these fluctuations are often not related to our financial results. For the twelve months ended June 30, 2005, the 52-week range of the market price of our stock was from $3.68 to $7.56 per share. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock:

- announcements of technological innovations or new products by us or our competitors;
- developments or disputes concerning patents or proprietary rights;
- status of new or existing licensing or collaborative agreements;

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

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

regulatory developments in both the United States and foreign countries;

public concern as to the safety of pharmaceutical products;

actual or anticipated fluctuations in our operating results;

changes in financial estimates or recommendations by securities analysts;

changes in the structure of healthcare payment systems, including developments in price control legislation;

announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;

additions or departures of key personnel or members of our board of directors;

sales of substantial amounts of our stock by existing stockholders, including officers or directors;

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

period-to-period fluctuations in our financial results.

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

As of June 30, 2005, our directors, executive officers and some principal stockholders and their affiliates beneficially owned approximately 43.9% (directors and officers, together with their relevant affiliates owned 25.5%) of our outstanding common stock and common stock equivalents. As a result, these holders, if acting together, are able to significantly influence matters requiring stockholder approval, including the election of directors. This concentration of ownership may delay, defer or prevent a change in our control.

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

Our board of directors has the authority to issue up to 3,178,500 shares of undesignated preferred stock and to determine the rights, preferences, privileges and restrictions of those shares without further vote or action by our stockholders. The rights of the holders of any preferred stock that may be issued in the future may adversely affect the rights of the holders of common stock. The issuance of preferred stock could make it more difficult for third parties to acquire a majority of our outstanding voting stock.

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

In June 2002, our board of directors adopted a stockholder rights plan and, pursuant thereto, issued preferred stock purchase rights ( Rights ) to the holders of our common stock. The Rights have certain anti-takeover effects. If triggered, the Rights would cause substantial dilution to a person or group of persons who acquires more than 15% (19.9% for William W. Featheringill, a Director who owned approximately 11% as of June 30, 2005, but owned more than 15% at the time the Rights were put in place) of our common stock on terms not approved by the board of

directors.

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***We have never paid dividends on our common stock and do not anticipate doing so in the foreseeable future.***

We have never paid cash dividends on our stock. We currently intend to retain all future earnings, if any, for use in the operation of our business. Accordingly, we do not anticipate paying cash dividends on our common stock in the foreseeable future.

**Risks Relating to This Offering**

***The projections contained in this prospectus or any applicable prospectus supplement, and the registration statement of which this prospectus or any applicable prospectus supplement may be a part, are based on assumptions that may not materialize.***

The projections of our business included in this prospectus or any applicable prospectus supplement are based on assumptions which we believe are reasonable as of the date of the prospectus or prospectus supplement. No assurance can be given, however, regarding the attainability of the projections or the reliability of the assumptions on which they are based. Certain of the assumptions used may not materialize and unanticipated events may occur. Therefore, our actual results of operations may vary from the projections contained within this prospectus or any applicable prospectus supplement, and such variations may be material.

***Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.***

We have not designated the amount of net proceeds we will use for any particular purpose. Accordingly, our management will have broad discretion as to the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management proposes to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase our market value or make us profitable.

## Information Regarding Forward-Looking Statements

This prospectus contains forward-looking statements that involve risks and uncertainties. All statements other than statements of historical facts contained in this prospectus are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as may, could, will, should, expect, plan, anticipat estimate, intend, predict, seek, potential or continue or the negative of these terms or other comparable termin These forward-looking statements include, but are not limited to, statements about:

- the initiation, timing, progress and results of our preclinical and clinical trials, research and development programs;
- the further preclinical or clinical development and commercialization of our product candidates;
- the implementation of our business model, strategic plans for our business, product candidates and technology;
- our ability to establish and maintain corporate collaborations;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- our ability to operate our business without infringing the intellectual property rights of others;
- estimates of our expenses, future revenues, capital requirements and our needs for additional financing;
- the timing or likelihood of regulatory filings and approvals;

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our intention to seek a special protocol assessment from the FDA in 2005;

our use of proceeds from any offerings under this prospectus;

our financial performance; and

competitive companies, technologies and our industry.

These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under Risk Factors and elsewhere in this prospectus. Any forward-looking statement in this prospectus reflects our current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, industry and future growth. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

Discussions containing these forward-looking statements are also contained in Management s Discussion and Analysis of Financial Condition and Results of Operations incorporated by reference from our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q for the quarters ended since our most recent Annual Report, as well as any amendments we make to those filings with the SEC.

## Use of Proceeds

Except as otherwise described in the applicable prospectus supplement, the net proceeds from the sale of the common stock offered hereunder will be added to our general funds and used for general corporate purposes, which may include, but are not limited to:

research and development activities;

preclinical studies and clinical trials;

increased manufacturing of compounds for clinical trials, toxicology studies and validation of both the manufacturing and formulation processes;

capital expenditures; and

general working capital.

We may also use a portion of the net proceeds to acquire or invest in businesses, assets, products and technologies that are complementary to our own, although we are not currently contemplating or negotiating any such acquisitions.

The amounts and timing of our actual expenditures for each purpose may vary significantly depending upon numerous factors, including the status of our product development efforts, regulatory approvals, competition, marketing and sales activities and the market acceptance of any products we introduce. Pending such uses, we intend to invest the net proceeds of this offering in investment grade, interest-bearing securities.

## Plan of Distribution

We may sell the securities being offered hereby at prices and under terms then prevailing, at prices related to the then current market price or in negotiated transactions from time to time in one or more of the following ways:

directly to one or more purchasers;

through one or more underwriters on a firm commitment or best-efforts basis;

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through broker-dealers, who may act as agents or principals, including a block trade in which a broker or dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

through agents;

in privately negotiated transactions; or

in any combination of these methods of sale.

We will set forth in a prospectus supplement the terms of the offering of securities, including:

the name or names of any agents or underwriters, dealers or agents;

the number of shares and purchase price of the common stock being offered and the proceeds we will receive from the sale;

any underwriting discounts and commissions or agency fees and other items constituting underwriters or agents compensation;

any over-allotment options under which underwriters may purchase additional securities from us;

any discounts or concessions allowed or re-allowed or paid to dealers; and

any securities exchange on which the common stock may be listed.

The distribution of the common stock may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices related to the prevailing market prices or at negotiated prices.

**Agents**

We may designate agents who agree to use their reasonable efforts to solicit purchases for the period of their appointment or to sell common stock on a continuing basis. Agents may receive compensation in the form of commissions, discounts or concessions from us. Agents may also receive compensation from the purchasers of the common stock for whom they sell as principals. Each particular agent will receive compensation in amounts negotiated in connection with the sale, which might be in excess of customary commissions. Agents and any other participating broker-dealers may be deemed to be underwriters within the meaning of Section 2(11) of the Securities Act in connection with sales of the shares. Accordingly, any commission, discount or concession received by them and any profit on the resale of the common stock purchased by them may be deemed to be underwriting discounts or commissions under the Securities Act. We have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their securities. As of the date of this prospectus, there are no special selling arrangements between any broker-dealer or other person and us. No period of time has been fixed within which the shares will be offered or sold.

If required under applicable state securities laws, we will sell the common stock only through registered or licensed brokers or dealers. In addition, in some states, we may not sell shares of common stock unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and complied with.

**Underwriters**

If we use underwriters for a sale of common stock, the underwriters will acquire the common stock for their own account. The underwriters may resell the common stock in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the common stock will be subject to the conditions set forth in the applicable underwriting agreement. We may change from time to time any initial public offering price and any discounts or concessions the

underwriters allow or re-allow or pay to dealers. We may use underwriters with

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whom we have a material relationship. We will describe in the prospectus supplement naming the underwriter the nature of any such relationship.

**Direct Sales**

We may also sell common stock directly to one or more purchasers without using underwriters or agents. Underwriters, dealers and agents that participate in the distribution of the common stock may be underwriters as defined in the Securities Act and any discounts or commissions they receive from us and any profit on their resale of the common stock may be treated as underwriting discounts and commissions under the Securities Act. We will identify in the applicable prospectus supplement any underwriters, dealers or agents and will describe their compensation. We may have agreements with the underwriters, dealers and agents to indemnify them against specified civil liabilities, including liabilities under the Securities Act. Underwriters, dealers and agents may engage in transactions with or perform services for us in the ordinary course of their businesses.

**Stabilization Activities**

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the common stock in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the common stock originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the common stock to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time. These transactions may be effected on The Nasdaq National Market or otherwise.

**Passive Market Making**

Any underwriters who are qualified market makers on The Nasdaq National Market may engage in passive market making transactions in the common stock on The Nasdaq National Market in accordance with Rule 103 of Regulation M, during the business day before the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker s bid, however, the passive market maker s bid must then be lowered when certain purchase limits are exceeded.

**Costs**

We will bear all costs, expenses and fees in connection with the registration of the common stock, as well as the expense of all commissions and discounts, if any, attributable to sales of the common stock by us.

## Legal Matters

The validity of the common stock offered hereby will be passed on for us by Holme Roberts & Owen LLP, Denver, Colorado. As of August 20, 2005, a partner of Holme Roberts & Owen LLP beneficially owned a total of 5,000 shares of our common stock.

## Experts

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2004, and management s assessment of the effectiveness of our internal control over financial reporting as of December 31, 2004, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration

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statement. Our financial statements and management s assessment are incorporated by reference in reliance on Ernst & Young LLP s reports, given on their authority as experts in accounting and auditing.

## Where You Can Find More Information

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission under the Securities Exchange Act of 1934. You may read and copy this information at the following location at the SEC:

100 F Street, N.E., Room 1580
Washington, D.C. 20549

You can also obtain copies of this information by mail from the Public Reference Room of the SEC, 100 F Street, N.E., Room 1580, Washington D.C. 20549, at prescribed rates. You may obtain information on the operation of the Public Reference Room by calling the SEC at (800) SEC-0330.

The SEC also maintains an Internet world wide web site that contains reports, proxy statements and other information about issuers, like BioCryst, that file electronically with the SEC. The address of that site is http://www.sec.gov.

We have filed with the SEC a registration statement on Form S-3 that registers the securities we are offering. The registration statement, including the attached exhibits and schedules, contains additional relevant information about us and our securities. The rules and regulations of the SEC allow us to omit certain information included in the registration statement from this prospectus.

## Incorporation of Certain Documents by Reference

The SEC allows us to incorporate by reference information into this prospectus. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this prospectus, except for any information that is superseded by information that is included directly in this document.

This prospectus includes by reference the documents listed below that we have previously filed with the SEC and that are not included in or delivered with this document. They contain important information about BioCryst and its financial condition.

(a) Our Annual Report on Form 10-K for the year ended December 31, 2004;

(b) Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2005 and June 30, 2005;

(c) Our Current Reports on Form 8-K filed with the SEC on February 7, 2005, February 17, 2005, March 9, 2005, March 15, 2005, March 21, 2005, May 10, 2005, June 20, 2005, July 1, 2005, August 9, 2005 (two filings) and August 31, 2005;

(d) Our Definitive Proxy Statement on Schedule 14A filed with the SEC on April 6, 2005;

(e) The description of our common stock which is contained in our Registration Statement on Form 8-A filed with the SEC on January 8, 1994, including any amendment or reports filed for the purpose of updating such description; and

(f) The description of our preferred share purchase rights which is contained in our Registration Statement on Form 8-A filed with the SEC on June 17, 2002, including any amendment or reports filed for the purpose of updating such description.

All documents filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of this offering shall be deemed to be incorporated by reference herein and to be a part of this prospectus from the date of filing of such documents, excluding any information furnished under Item 2.02 or Item 7.01 of any Current Report on Form 8-K. Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for

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purposes of this prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You can obtain any of the documents incorporated by reference in this document from us without charge, excluding any exhibits to those documents unless the exhibit is specifically incorporated by reference as an exhibit to this prospectus. You can obtain documents incorporated by reference in this prospectus by requesting them in writing or by telephone from us at the following address:

Michael A. Darwin
Chief Financial Officer and Secretary
BioCryst Pharmaceuticals, Inc.
2190 Parkway Lake Drive
Birmingham, Alabama 35244
(205) 444-4600

We have not authorized anyone to give any information or make any representation about us that is different from, or in addition to, that contained in this prospectus or in any of the materials that we have incorporated by reference into this document. Therefore, if anyone does give you information of this sort, you should not rely on it. If you are in a jurisdiction where offers to sell, or solicitations of offers to purchase, the securities offered by this document are unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this document does not extend to you.

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**BioCryst Pharmaceuticals, Inc.**
**$85,000,000**
**Common Stock**

**PROSPECTUS**

, 2005

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## PART II
## INFORMATION NOT REQUIRED IN PROSPECTUS

**ITEM 14.** ***OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.***

The following table sets forth all expenses payable by the Registrant in connection with the issuance and distribution of the securities, other than underwriting discounts and commissions. The Registrant will bear all of such expenses. All the amounts shown are estimates, except the registration fee.

| | | |
|---|---|---|
| Registration fee | $ | 10,004.50 |
| Accounting fees and expenses | | 10,000.00 |
| Legal fees and expenses | | 20,000.00 |
| Printing and engraving | | 5,000.00 |
| Miscellaneous | | 4,995.50 |
| Total | $ | 50,000.00 |

**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.***

| Exhibit No. | Description |
|---|---|
| 3.1 | Composite Certificate of Incorporation of Registrant. (Incorporated by reference to Exhibit 3.1 to the Registrant s Form 10-Q for the second quarter ending June 30, 1995 dated August 11, 1995.) |
| 3.2 | Bylaws of Registrant as amended March 7, 2005. (Incorporated by reference to Exhibit 3.1 to the Registrant s Form 8-K filed March 9, 2005.) |
| 4.1 | Specimen certificate for shares of the Registrant s Common Stock. (Incorporated herein by reference to Exhibit 4.1 to the Registrant s Registration Statement No. 33-73868.) |
| 4.2 | Rights Agreement, dated as of June 17, 2002, by and between the Company and American Stock Transfer & Trust Company, as Rights Agent, which includes the Certificate of Designation for the Series B Junior Participating Preferred Stock as Exhibit A and the form of Rights Certificate as Exhibit B. (Incorporated by reference to Exhibit 4.1 to the Registrant s Form 8-A dated June 17, 2002.) |
| 5.1 | Opinion of Holme Roberts & Owen LLP |
| 23.1 | Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm |
| 23.2 | Consent of Holme Roberts & Owen LLP (included in Exhibit 5.1) |
| 24.1 | Powers of Attorney (included on signature page) |

**ITEM 17.** ***UNDERTAKINGS.***

(a) The Registrant hereby undertakes:

(i) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(1) To include any prospectus required by Section 10(a)(3) of the Securities Act;

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(2) 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;

(3) 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 paragraphs (a)(i)(1) and (a)(i)(2) do not apply if the registration statement is on Form S-3, Form S-8 or Form F-3, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(ii) That, for the purpose of determining any liability under the Securities 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.

(iii) 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.

(iv) For purposes of determining any liability under the Securities 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 Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(v) For the purpose of determining any liability under the Securities 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.

(b) The Registrant hereby undertakes that, for purposes of determining any liability under the Securities 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.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to any charter provision, bylaw, contract, arrangement, statute, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the 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 against the Registrant by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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## 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 its behalf by the undersigned, thereunto duly authorized, in the City of Birmingham, State of Alabama, on the 2nd day of September, 2005.

BioCryst Pharmaceuticals, Inc.
By: /s/ Charles E. Bugg

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

## POWER OF ATTORNEY

We, the undersigned officers and directors of BioCryst Pharmaceuticals, Inc. hereby severally constitute and appoint Charles E. Bugg, Ph.D. and Michael A. Darwin, and each of them singly, our true and lawful attorneys, with full power to them and each of them singly, to sign for us in our names in the capacities indicated below, any and all amendments (including post-effective amendments or any abbreviated Registration Statement, and any amendments thereto, filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission; granting unto said attorneys-in-fact full power and authority to perform any other act on behalf of the undersigned required to be done in the premises, hereby ratifying and confirming all that said attorneys-in-fact lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-3 has been signed by the following persons in the capacities indicated on the 2nd day of September, 2005.

| Name | Title |
|---|---|
| /s/ Charles E. Bugg<br>Charles E. Bugg, Ph.D. | Chairman and Chief Executive Officer (Principal Executive Officer) |
| /s/ Michael A. Darwin<br>Michael A. Darwin | Chief Financial Officer and Secretary (Principal Financial and Accounting Officer) |
| /s/ J. Claude Bennett<br>J. Claude Bennett, M.D. | Director |
| /s/ William W. Featheringill<br>William W. Featheringill | Director |
| /s/ Carl L. Gordon<br>Carl L. Gordon, CFA, Ph.D. | Director |
| /s/ John L. Higgins | Director |

John L. Higgins

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| Name | Title |
|---|---|
| /s/ Zola P. Horovitz | Director |
| Zola P. Horovitz, Ph.D. | |
| /s/ Joseph H. Sherrill, Jr. | Director |
| Joseph H. Sherrill, Jr. | |
| /s/ William M. Spencer, III | Director |
| William M. Spencer, III | |
| /s/ Randolph C. Steer | Director |
| Randolph C. Steer, M.D., Ph.D. | |

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## EXHIBIT INDEX

| Exhibit No. | Description |
|---|---|
| 3.1 | Composite Certificate of Incorporation of Registrant. (Incorporated by reference to Exhibit 3.1 to the Registrant s Form 10-Q for the second quarter ending June 30, 1995 dated August 11, 1995.) |
| 3.2 | Bylaws of Registrant as amended March 7, 2005. (Incorporated by reference to Exhibit 3.1 to the Registrant s Form 8-K filed March 9, 2005.) |
| 4.1 | Specimen certificate for shares of the Registrant s Common Stock. (Incorporated herein by reference to Exhibit 4.1 to the Registrant s Registration Statement No. 33-73868.) |
| 4.2 | Rights Agreement, dated as of June 17, 2002, by and between the Company and American Stock Transfer & Trust Company, as Rights Agent, which includes the Certificate of Designation for the Series B Junior Participating Preferred Stock as Exhibit A and the form of Rights Certificate as Exhibit B. (Incorporated by reference to Exhibit 4.1 to the Registrant s Form 8-A dated June 17, 2002.) |
| 5.1 | Opinion of Holme Roberts & Owen LLP |
| 23.1 | Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm |
| 23.2 | Consent of Holme Roberts & Owen LLP (included in Exhibit 5.1) |
| 24.1 | Powers of Attorney (included on signature page) |