SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(D)
OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report: March 15, 2005

BioCryst Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware	**000-23186**	**62-1413174**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer Identification #)**

2190 Parkway Lake Drive, Birmingham, Alabama 35244
(Address of Principal Executive Office)

(205) 444-4600
(Registrant's telephone number, including area code)

Item 8.01 Other Events.

On March 15, 2005, Registrant issued a press release announcing the successful completion of a Phase I clinical trial with oral BCX-4208 for psoriasis. The press release is being furnished as Exhibit 99.1 to this Current Report on Form 8-K.

Neither the furnishing of any press release as an exhibit to this Current Report on Form 8-K nor the inclusion in such press release of a reference to Registrant's Internet address shall, under any circumstances, be deemed to incorporate the information available at such Internet address into this Current Report on Form 8-K. The information available at Registrant's Internet address is not part of this Current Report on Form 8-K or any other report filed by Registrant with the Securities and Exchange Commission.

Item 9.01 Exhibits.

Exhibit No.	Description
99.1	Press release dated March 15, 2005 entitled "BioCryst Pharmaceuticals Successfully Completes Phase I Trial with Oral BCX-4208 for Psoriasis".

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: March 15, 2005

BIOCRYST PHARMACEUTICALS, INC.

By: /s/ MICHAEL A. DARWIN

Michael A. Darwin
Chief Financial Officer and
Chief Accounting Officer

EXHIBIT INDEX

Item	Description
99.1	Press release dated March 15, 2005 entitled “BioCryst Pharmaceuticals Successfully Completes Phase I Trial with Oral BCX-4208 for Psoriasis”.

Exhibit 99.1

BIOCRYST PHARMACEUTICALS, INC.
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FOR IMMEDIATE RELEASE

BIOCRYST PHARMACEUTICALS SUCCESSFULLY COMPLETES PHASE I TRIAL WITH ORAL BCX-4208 FOR PSORIASIS

- Novel oral small molecule demonstrates safety in 84 healthy volunteers -

Birmingham, AL - March 15, 2005 – BioCryst Pharmaceuticals, Inc. (Nasdaq: BCRX) announced today that BCX-4208 has successfully completed a Phase I, placebo-controlled, single ascending dose, pharmacokinetic and safety trial involving 84 healthy volunteers. The study, which evaluated the pharmacokinetic profile for this oral formulation, measured BCX-4208 inhibition of the target enzyme purine nucleoside phosphorylase (PNP), and included detailed safety evaluations of renal and liver function, hematologic parameters, immunological markers, and cardiac function as measured through continuous ECG monitoring, including detailed QTc evaluations.

Results from this Phase I study indicate that single doses of BCX-4208 ranging from 0.5 mg/kg to 3 mg/kg were well-tolerated among the broad spectrum of safety parameters being monitored. Additionally, BCX-4208 achieved a dose-related inhibition of PNP, which effectively increases the serum level of deoxyguanosine that is necessary for selective suppression of T-cell activation.

Based on these positive results, BioCryst intends to initiate a randomized, double-blind, escalating multi-dose Phase I trial with BCX-4208 to further evaluate its safety profile and pharmacokinetics in approximately 60 healthy volunteers beginning in the second quarter of 2005. “The results from our first trial are very encouraging, and we are committed to the development of BCX-4208 for the treatment of psoriasis and other T-cell mediated conditions where an oral therapy offers clear advantages and might greatly improve patient quality of life,” stated Dr. Charles E. Bugg, Chairman and CEO of BioCryst.

About Psoriasis

Psoriasis is a chronic skin disease that affects more than seven million Americans, according to the National Psoriasis Foundation. Approximately 30% of people with psoriasis under a physician’s care are estimated to have moderate to severe forms of the disease. Furthermore, it is estimated that the prevalence of psoriasis in Western Europe is approximately 14 million people and approximately 74 million people in Asia, according to Scrip and NIH reports in 2003.

About BCX-4208

BCX-4208 is BioCryst’s second generation, more potent transition-state analog inhibitor of PNP. The complex of BCX-4208 and PNP has a long half-life (approximately 8 days) with suitable oral bioavailability, which supports BCX-4208 as a good candidate for chronic dosing in autoimmune diseases such as psoriasis. The clinical development program for BCX-4208 is being conducted under an Investigational New Drug Application filed with the FDA for treatment of psoriasis. In addition to psoriasis, BioCryst intends to investigate the potential of BCX-4208 for the treatment of other clinical conditions that are believed to involve T-cell activation, including rheumatoid arthritis, Crohn’s disease and transplant rejection.

About BioCryst

BioCryst Pharmaceuticals, Inc. designs, optimizes and develops novel drugs that block key enzymes involved in cancer, cardiovascular diseases, autoimmune diseases, and viral infections. BioCryst integrates the necessary disciplines of biology, crystallography, medicinal chemistry and computer modeling to effectively use structure-based drug design to discover and develop small molecule pharmaceuticals.

BioCryst's first lead product candidate, forodesine hydrochloride (BCX-1777), another transition-state analog inhibitor of PNP, is currently in a Phase IIa trial for patients with T-cell malignancies and a Phase I trial with oral forodesine hydrochloride in cutaneous T-cell lymphoma (CTCL). BioCryst also plans to initiate a Phase I/II trial in B-cell acute lymphoblastic leukemia during the first half of 2005. Forodesine hydrochloride has been granted Orphan Drug status by the U.S. Food and Drug Administration for three indications: T-cell non-Hodgkin's lymphoma, including CTCL; chronic lymphocytic leukemia (CLL) and related leukemias including prolymphocytic leukemia, adult T-cell leukemia, and hairy cell leukemia; and for treatment of acute lymphoblastic leukemia (ALL). Following successful completion of Phase I clinical trials with its second generation PNP inhibitor, BCX-4208, BioCryst plans to initiate a Phase II study in psoriasis during the second half of 2005. In addition, BioCryst is advancing two preclinical programs in the area of hepatitis C polymerase and tissue factor/factor VIIa. For more information about BioCryst, please visit the company's web site at www.biocryst.com.

Forward-looking statements

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. 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. Some of the factors that could affect the forward-looking statements contained herein include that we may not be able to enroll the required number of subjects in clinical trials of forodesine hydrochloride or BCX-4208, that the Phase I trial of forodesine hydrochloride for treatment of patients with cutaneous T-cell lymphoma may not be successfully completed, that BioCryst may not commence as expected additional trials with forodesine hydrochloride and Phase II studies with BCX-4208, that forodesine hydrochloride or BCX-4208 may not prove to be safe or effective, that forodesine hydrochloride, BCX-4208, or any of our other product candidates may not receive required regulatory clearances from the FDA, that Phase IIa clinical trials of forodesine hydrochloride may not show the drug is effective over the 6-week period, that we may not be able to obtain a Special Protocol Assessment or otherwise be able to complete successfully the Phase IIb trial that is currently planned, that we may not be able to continue future development of forodesine hydrochloride, BCX-4208 or any of our other current development programs including tissue factor/factor VIIa and hepatitis C polymerase, that forodesine hydrochloride, BCX-4208 or our other development programs may never result in future product, license or royalty payments being received by BioCryst, that BioCryst may not have sufficient cash to continue funding the development, manufacturing, marketing or distribution of its products and that additional funding, if necessary, may not be available at all or on terms acceptable to BioCryst. Please refer to the documents BioCryst files periodically with the Securities and Exchange Commission, specifically BioCryst's most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and periodic reports on Form 8-K, which identify important factors that could cause the actual results to differ materially from those contained in the projections or forward-looking statements.

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