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 27, 2007

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)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2 below):

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 210.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01 Other Events.

On March 27, 2007, Registrant issued a press release announcing an update on the status of its Fodosine™ program. The press release is being filed as Exhibit 99.1 to this Current Report on Form 8-K.

Neither the filing 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 27, 2007 entitled "BioCryst Provides Fodosine™ Update".

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 27, 2007

BioCryst Pharmaceuticals, Inc.

By: /s/ Michael A. Darwin
Michael A. Darwin
Chief Financial Officer and Chief Accounting Officer

EXHIBIT INDEX

Exhibit	Description
99.1	Press release dated March 27, 2007 entitled “BioCryst Provides Fodosine™ Update”.

Exhibit 99.1

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FOR IMMEDIATE RELEASE

BIOCRYST PROVIDES FODOSINE™ UPDATE

Birmingham, Alabama — March 27, 2007 — BioCryst Pharmaceuticals, Inc. (Nasdaq: BCRX) today provided an update regarding the company's development programs for Fodosine™.

Phase IIb Trial in T-ALL Voluntarily Placed on Hold by BioCryst Due to Stability Issue with the Intravenous Formulation of Fodosine™
BioCryst is voluntarily placing its Phase IIb clinical trial of intravenous (I.V.) Fodosine™ in the treatment of patients with T-cell acute lymphoblastic leukemia/lymphoma (T-ALL/LBL) on hold. The oral capsules being used in other clinical trials of Fodosine™, including the CTCL trial, are not affected and those trials continue.

Recent stability results detected particulate matter in clinical batches of the intravenous formulation of Fodosine™. Preliminary findings have suggested that the particulates are associated with the vial stoppers used in clinical packaging and may result from an interaction between a component of the stopper and a component of the drug solution.

Assay data do not suggest any decrease in the potency of the Fodosine™ active drug product. The proportion of study drug vials affected has not been exactly ascertained; therefore BioCryst determined that it was appropriate to suspend all patient treatment with any intravenous formulation. BioCryst has informed the Food and Drug Administration (FDA) that an internal investigation is ongoing and that patient treatment has been halted. BioCryst and Mundipharma, its partner in the development of Fodosine™, are working together to identify the best path forward for this formulation.

"We are working closely with our partner, Mundipharma to collect and analyze all of the relevant data. In the meantime, we are putting enrollment of new patients on hold until we have a clearer understanding of the situation," said Jon P. Stonehouse, Chief Executive Officer of BioCryst. "This issue is limited to the intravenous formulation of Fodosine™ and does not affect the oral formulations currently being used in our other studies of Fodosine™. We continue to be enthusiastic about Fodosine™ and anticipate initiating a Phase IIb study in CTCL later this year."

Completed Phase IIa Trial of Fodosine™ in Patients with T-ALL Shows Lower Response Rate
In the now-completed Phase IIa trial of Fodosine™ in the treatment of T-ALL, patients continued to enroll after data were last presented at the Annual Meeting of the American Society of Hematology (ASH) in December 2006. A preliminary analysis of the data now available suggests the response rates may be lower than previously reported at the ASH meeting.

"As the study progressed toward the target number of 80 subjects treated, the response rate appears to have decreased from the 18% reported at ASH in December, 2006. While the company considers these results preliminary, we don't think the final response rate will be as high as 18%," said W. James Alexander, M.D., M.P.H., Senior Vice President, Clinical and Regulatory Operations and Chief Medical Officer of BioCryst. "We are still in the process of collecting all the data for analysis."

Company will Focus Efforts on Fodosine™ in Treatment of CTCL
Mr. Stonehouse commented, "As an emerging biotechnology company, BioCryst is focused on bringing compelling products to market as quickly as possible for the benefit of patients and shareholders. Among the primary reasons BioCryst chose to pursue treatment of T-ALL as the lead indication in the Fodosine™ program were the fact that T-ALL

was the indication in which we first saw clinical activity and the belief that T-ALL could potentially be the fastest route to approval for the drug. Over the past year we have generated significant clinical data indicating the activity and safety of Fodosine™ in CTCL. Given the necessary delays associated with addressing the formulation issues now affecting the continued progress of the T-ALL trial, as well as the limited number of patients with T-ALL who are eligible to be treated under our protocol, BioCryst's strategy going forward will be to focus its resources on CTCL as the disease indication which the company believes could provide the fastest route to marketing approval of Fodosine™. The results in treatment of CTCL with the oral formulation of Fodosine™ remain encouraging and we believe that this decision will allow us the greatest chance of getting Fodosine™ to a larger number of patients quickly. To this end we have requested a Special Protocol Assessment (SPA) with the FDA as an integral part of the clinical design of the next trial in CTCL. We filed our initial application for the SPA with the FDA last week and look forward to working closely with the Agency to move this program forward expeditiously."

BioCryst will sponsor a conference call at 9:00 a.m. Eastern U.S. Time on Tuesday, March 27, 2007 to discuss today's news in more detail. This call is open to the public and can be accessed live either over the Internet from the company's website www.biocryst.com or by dialing 1-800-289-0572 (U.S.) or 1-913-981-5543 (international). No passcode is needed for the call.

About BioCryst

BioCryst Pharmaceuticals, Inc. is a leader in the use of crystallography and structure-based drug design for the development of novel therapeutics to treat cancer, cardiovascular diseases, autoimmune diseases, and viral infections. The company is advancing multiple internal programs toward potential commercialization including Fodosine™ in oncology, BCX-4208 in transplantation and autoimmune diseases and peramivir in seasonal and life-threatening influenza. BioCryst has a worldwide partnership with Roche for the development and commercialization of BCX-4208, and is collaborating with Mundipharma for the development and commercialization of Fodosine™ in markets across Europe, Asia, Australia and certain neighboring countries. In January, 2007 the U.S. Department of Health and Human Services (DHHS) awarded a $102.6 million, four-year contract to BioCryst for advanced development of peramivir to treat seasonal and life-threatening influenza. In February 2007 BioCryst established a partnership with Shionogi & Co., to develop and commercialize peramivir in Japan**.** For more information about BioCryst, please visit the company's web site at http://www.biocryst.com.

Forward-looking statements

This press release contains forward-looking statements, including statements regarding future results, performance or achievements. 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 development and commercialization of Fodosine™ in both T-ALL and CTCL may not be successful, that we may not resolve satisfactorily the particulate matter issue with the intravenous formulation of Fodosine™, that we may not obtain a satisfactory SPA for Fodosine™ for treatment of CTCL promptly or at all, that DHHS could reduce or eliminate funding for peramivir, that we or our licensees may not be able to enroll the required number of subjects in planned clinical trials of our product candidates and that such clinical trials may not be successfully completed, that BioCryst or its licensees may not commence as expected additional human clinical trials with our product candidates, that our product candidates may not receive required regulatory clearances from the FDA, that ongoing and future clinical trials may not have positive results, that we may not be able to complete successfully the Phase IIb trial for Fodosine™ that is currently planned to be pivotal, that we or our licensees may not be able to continue future development of our current and future development programs, that our development programs may never result in future product, license or royalty payments being received by BioCryst, that BioCryst may not reach favorable agreements with potential pharmaceutical and biotech partners for further development of its product candidates, 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, current 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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