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**UNITED STATES  
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 (Date of earliest event reported): July 10, 2008

**BioCryst Pharmaceuticals, Inc.**

(Exact name of registrant as specified in its charter)

<b>Delaware</b> (State or other Jurisdiction of Incorporation)	<b>000-23186</b> (Commission File Number)	<b>62-1413174</b> (IRS Employer Identification No.)
<b>2190 Parkway Lake Drive, Birmingham, Alabama</b> (Address of Principal Executive Offices)		<b>35244</b> (Zip Code)

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

(Former name or former address if changed since last report.)

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:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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**Item 8.01 Other Events**

BioCryst Pharmaceuticals, Inc. (the “Company”) announced the initiation of a Phase II study of intramuscular (i.m.) peramivir for the treatment of seasonal influenza.

On July 10, 2008, the Company issued a press release entitled “BioCryst Announces Initiation of Phase II Study of Intramuscular Peramivir for the Treatment of Seasonal Influenza” a copy of which is filed herewith as Exhibit 99.1.

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. Financial Statements and Exhibits:**

<b>Exhibit No.</b>	<b>Description</b>
99.1	Press Release dated July 10, 2008 entitled “BioCryst Announces Initiation of Phase II Study of Intramuscular Peramivir for the Treatment of Seasonal Influenza.”

**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: July 10, 2008

**BioCryst Pharmaceuticals, Inc.**

By: /s/ Michael A. Darwin

Michael A. Darwin

Principal Accounting Officer

**EXHIBIT INDEX**

<b>Exhibit No.</b>	<b>Description</b>
99.1	Press Release dated July 10, 2008 entitled “BioCryst Announces Initiation of Phase II Study of Intramuscular Peramivir for the Treatment of Seasonal Influenza”



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#### **BioCryst Announces Initiation of Phase II Study of Intramuscular Peramivir for the Treatment of Seasonal Influenza**

BIRMINGHAM, Ala., July 10, 2008 — BioCryst Pharmaceuticals, Inc. (Nasdaq: BCRX) today announced the initiation of a Phase II study of intramuscular (i.m.) peramivir for the treatment of seasonal influenza.

The double-blind, placebo-controlled, parallel group Phase II trial will compare the efficacy of a single 600 mg injection of i.m. peramivir to placebo in the treatment of seasonal influenza. The dose was selected based upon an analysis of a recently completed Phase I study of a new, more concentrated 150 mg/ml formulation of i.m. peramivir, as well as prior studies of peramivir in patients with influenza. The Phase II study will utilize the new, more concentrated 150 mg/ml formulation and needle length guidelines established in recently conducted pharmacokinetic studies.

The primary endpoint of BioCryst's Phase II trial is improvement in time to alleviation of symptoms in patients. Secondary endpoints include reduction in viral titers and safety and tolerability. The trial is expected to enroll approximately 320 patients and will be conducted in the Southern Hemisphere.

"Conducting this study with our new, more concentrated formulation allows us to test peramivir in the outpatient setting at a higher dose than previously evaluated," stated Jon P. Stonehouse, President and Chief Executive Officer of BioCryst. "We are confident the results of this study will move us one step closer to offering a novel and important therapeutic option for the treatment of influenza infections."

#### **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 forodesine HCl in oncology, BCX-4208 in psoriasis and peramivir in seasonal and life-threatening influenza. BioCryst is collaborating with Mundipharma for the development and commercialization of forodesine HCl in markets across Europe, Asia, Australia and certain neighboring countries. In January 2007, the U.S. Department of Health and Human Services (HHS) awarded a \$102.6 million, four-year contract to BioCryst to advance 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>.

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#### 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 our belief that many subjects in the Phase II clinical trials of peramivir did not receive adequate dosing by intramuscular injection may not be correct, that HHS and the Food & Drug Administration (FDA) may not agree with our analysis, that HHS may further condition, reduce or eliminate future funding of the peramivir program, that ongoing peramivir clinical trials may not be successful, that the peramivir program may not be successful, that the pivotal trial with forodesine HCl in cutaneous T-cell lymphoma (CTCL) may not meet its endpoint, that the Phase II trial of BCX-4208 for psoriasis may not be successfully completed, that development and commercialization of forodesine HCl in CTCL may not be successful, 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 preclinical and clinical development may not have positive results, 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 be able to retain its current pharmaceutical and biotechnology partners for further development of its product candidates or it may not reach favorable agreements with potential pharmaceutical and biotechnology partners for further development of its product candidates, that our projected burn rate may not be consistent with our expectations, 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, most recent Registration Statement on Form S-3 (File No. 333-145638), 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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Contact: Stuart Grant, CFO of BioCryst Pharmaceuticals (205) 444-4600