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 5, 2007

BioCryst Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware

(State or other jurisdiction of incorporation)

000-23186

(Commission File Number)

62-1413174

(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)
- 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 1.01 Entry Into A Material Definitive Agreement.

On March 5, 2007, BioCryst Pharmaceuticals, Inc. (the "Company") announced that it entered into an exclusive license agreement (the "Shionogi Agreement") with Shionogi & Co. Ltd. ("Shionogi"). The Shionogi Agreement is a collaboration between the Company and Shionogi for development and commercialization in Japan of the Company's clinical compound peramivir, for the treatment of seasonal and potentially life-threatening human influenza.

Under the Shionogi Agreement, Shionogi will obtain rights to injectable formulations of peramivir in Japan in exchange for a \$14 million up-front payment. BioCryst may also receive future clinical event milestone payments (up to \$21 million) and commercial event milestone payments (up to \$95 million) in addition to double digit (between 10 and 20% range) royalty payments on product sales of peramivir. Shionogi will be responsible for all development, regulatory and marketing costs in Japan.

BioCryst retains all rights to commercialize peramivir in North America, Europe, and other countries outside of Japan and Korea.

Item 8.01. Other Events and Regulation FD Disclosure.

On March 5, 2007 the Company issued a press release announcing the execution of the Shionogi Agreement. The press release is being filed as Exhibit 99.1 to this Current Report on Form 8-K and incorporated herein by reference.

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 5, 2007 entitled "BioCryst and Shionogi Establish Collaboration in Japan." |
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| | |

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 5, 2007

BioCryst Pharmaceuticals, Inc.

By: /s/ Michael A. Darwin

Michael A. Darwin

Chief Financial Officer and Chief Accounting Officer

EXHIBIT INDEX

<u>Description</u>
Press release dated March 5, 2007 entitled "BioCryst and Shionogi Establish Collaboration in Japan." Exhibit No. 99.1



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Contact: BioCryst Pharmaceuticals, Inc.

Jonathan M. Nugent V.P. Corporate Communications (205) 444-4633

FOR IMMEDIATE RELEASE

BIOCRYST AND SHIONOGI ESTABLISH COLLABORATION IN JAPAN

FOCUS ON INJECTABLE FORMULATIONS OF PERAMIVIR

Birmingham, Alabama — **March 5, 2007** — BioCryst Pharmaceuticals, Inc. (Nasdaq: BCRX) and Shionogi & Co., Ltd. today announced that they have entered into an exclusive license agreement to develop and commercialize BioCryst's lead influenza neuraminidase inhibitor, peramivir, in Japan for the treatment of seasonal and potentially life-threatening human influenza.

With a focus on infectious disease, Shionogi markets a robust pipeline of anti-infective ethical drugs. Among the company's lead products are Flomox® oral antibiotic, Flumarin® injectable antibiotic and Vancomycin, injectable antibiotic, each of which have secured the top share of their respective markets and have positioned Shionogi as a premier provider of superior pharmaceuticals.

"Shionogi is the leading infectious disease company in Japan, and this agreement further validates the therapeutic potential and commercial viability of peramivir in the treatment of influenza," said Randall B. Riggs, Senior Vice President, Corporate Development of BioCryst. "We look forward to leveraging the experience of our partner. Shionogi, as we continue to pursue the development and commercialization of peramivir."

"We believe Shionogi is the ideal partner to help bring our lead antiviral, peramivir, through development and to the market in Japan. We expect that this collaboration will accelerate the development and commercialization process in Japan," said Jon P. Stonehouse, Chief Executive Officer of BioCryst. "Additionally, BioCryst and Shionogi will collaborate to evaluate other injectable formulations of peramivir. Shionogi will retain Japanese marketing rights to all injectable formulations while BioCryst retains marketing rights for the rest of the world outside of Korea."

"Today's agreement," continued Mr. Stonehouse, "provides another source of funding, in addition to the \$102.6 million, four-year contract the U.S. Department of Health and Human Services (DHHS) recently awarded to BioCryst for advanced development of peramivir toward U.S. licensure.

"Shionogi has long focused on infections, one of the three target areas of its second medium-term management plan. Introducing peramivir is expected to strengthen Shionogi's efforts by further increasing treatment options demanded in this area," said Isao Teshirogi, Director of the Board and Senior Executive Officer responsible for Research & Development at Shionogi.

Under the terms of the agreement Shionogi will obtain rights to injectable formulations of peramivir in Japan in exchange for a \$14 million up-front payment. BioCryst may also receive future clinical event milestone payments (up to \$21 million) and commercial event milestone payments (up to \$95 million) in addition to double digit (between 10 and 20% range) royalty payments on product sales of peramivir.

BioCryst retains all rights to commercialize peramivir in North America, Europe, and other countries outside of Japan and Korea.

About Peramivir

Peramivir is a member of the class of antiviral agents that inhibit influenza viral neuraminidase, an enzyme that is essential for the spread of influenza virus within the host. In laboratory tests peramivir has been shown to be more potent than, and with activity against viral strains that are resistant to currently available neuraminidase inhibitors. Peramivir is an inhibitor of influenza A and B neuraminidases. At the Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) injectable formulations of peramivir were shown to be safely administered at high dose levels to healthy subjects and, in preclinical studies, peramivir has been shown to promote survival in animals infected with highly pathogenic strains of the H5N1 virus. The availability of an intravenous form may be important in treating patients hospitalized with severe life-threatening influenza; the intramuscular formulation will avoid dosing issues with currently available oral or inhaled agents.

About Influenza

The influenza virus causes an acute viral disease of the respiratory tract. Unlike the common cold and some other respiratory infections, seasonal flu can cause severe illness, resulting in life-threatening complications. According to the Centers for Disease Control and Prevention, every year in the United States more than 200,000 people are hospitalized from flu complications, and about 36,000 people die from flu. Most at risk are young children, the elderly, and people with seriously compromised immune systems.

H5N1 avian influenza is caused by a subtype of the influenza A virus. Circulating among birds worldwide, the virus is considered extremely contagious in fowl. It is believed that all species of birds are susceptible to avian influenza, but domestic poultry, including chickens and turkeys, are among the more susceptible to the highly pathogenic strain. According to the World Health Organization, at least 261 people have contracted H5N1 avian influenza, of which at least 157 have died. Almost all of these infections are believed to have resulted from contact with infected poultry.

About Shionogi & Co., Ltd.

Shionogi & Co., Ltd., one of Japan's largest research-based pharmaceutical companies, develops, manufactures, distributes, imports and exports pharmaceuticals and diagnostics. Shionogi aims to provide innovative medicines which make a positive contribution to world-wide health. For additional company information, please visit Shionogi on the World Wide Web at http://www.shionogi.co.jp.

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 FodosineTM 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 BCX-4208, and is collaborating with Mundipharma for the development and commercialization of FodosineTM 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. 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 peramivir in Japan may not be successful and BioCryst may not receive any or all of the potential event milestone payments or royalties described in this press release, 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.