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): May 7, 2012

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 No.)

4505 Emperor Blvd., Suite 200 Durham, North Carolina 27703 (Address of Principal Executive Offices)

(919) 859-1302 (Registrant's telephone number, including area code)

(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 (see General Instruction A.2 below):

□ 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 210.14d-2(b))

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

Item 2.02 Results of Operations and Financial Condition.

On May 7, 2012, BioCryst Pharmaceuticals, Inc. issued a news release announcing recent corporate developments and its financial results for the quarter ended March 31, 2012, which also referenced a conference call and webcast to discuss these recent corporate developments and financial results. A copy of the news release is furnished as Exhibit 99.1 hereto and is incorporated herein by reference.

Item 7.01 Regulation FD Disclosure

The information furnished on Exhibit 99.1 is incorporated by reference under this Item 7.01 as if fully set forth herein.

The information furnished is not deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, is not subject to the liabilities of that section and is not deemed incorporated by reference in any filing under the Securities Act of 1933, as amended.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.

Description

99.1 Press release dated May 7, 2012 entitled "BioCryst Provides Corporate Update and Reports First Quarter 2012 Financial Results"

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: May 7, 2012

BioCryst Pharmaceuticals, Inc.

By: /s/ Alane Barnes

Alane Barnes General Counsel, Corporate Secretary

EXHIBIT INDEX

Description

99.1 Press release dated May 7, 2012 entitled "BioCryst Provides Corporate Update and Reports First Quarter 2012 Financial Results"

Exhibit No.



BIOCRYST PROVIDES CORPORATE UPDATE AND REPORTS FIRST QUARTER 2012 FINANCIAL RESULTS

Research Triangle Park, North Carolina – May 7, 2012 – BioCryst Pharmaceuticals, Inc. (NASDAQ:BCRX) today announced financial results for the first quarter ended March 31, 2012.

"We just completed our end of Phase 2 meeting with the FDA regarding our gout program. The agency provided clear and informative guidance regarding the path to approval for BCX4208, and we are now incorporating this advice into the Phase 3 plan. Our goal is to conclude our partnering process during 2012 to enable Phase 3 trials to start as soon as possible," said Jon P. Stonehouse, President & Chief Executive Officer of BioCryst. "We are currently completing nonclinical safety studies for our preclinical drug candidates to treat hepatitis C and hereditary angioedema, and both programs remain on track to move into clinical trials before the end of this year. BioCryst continues to effectively execute its plan to advance four development programs, each representing value creation opportunities."

First Quarter Financial Results

For the three months ended March 31, 2012, revenues increased to \$12.2 million from \$5.4 million in last year's quarter. The large increase in revenue for the quarter relates to the recognition of \$7.8 million of forodesine-related revenue. The Company completed the transfer of the forodesine IND and other technical aspects of the program anticipated in the November 2011 restructuring of the license agreement between BioCryst and Mundipharma. Upon completion of this regulatory and technical transfer in the first quarter of 2012, all previously deferred revenue and expense associated with the Mundipharma relationship has been recognized. This transfer did not have any impact on the Company's cash balance.

Research and development expenses for the quarter increased to \$15.4 million from \$13.4 million in the first quarter of 2011, primarily due the recognition of \$1.9 million of deferred expenses associated with forodesine and the Mundipharma agreement. Higher development costs associated with the preclinical and peramivir development programs were offset by lower development costs associated with the BCX4208 gout program.

General and administrative expenses for the quarter decreased to \$1.8 million compared to \$3.5 million in last year's quarter. The decrease of \$1.7 million from 2011 is primarily the result of costs incurred in 2011 relating to the transition of the Company's headquarters to North Carolina, as well as reductions in other administrative expenses during 2012.

Interest expense related to the non-recourse notes increased to \$1.2 million in the first quarter of 2012 compared to \$0.3 million in the first quarter of 2011, due to recognizing a full quarter of interest expense in 2012 compared a partial month in 2011. In addition, a small mark-to-market gain on our foreign currency hedge was recognized in the first quarter of 2012, compared to a mark-to-market loss of \$1.3 million in the same quarter in the prior year, resulting from changes in the U.S. dollar/Japanese yen exchange rate.

The net loss for the first quarter 2012 was \$6.1 million, or \$0.13 per share, compared to a net loss of \$13.0 million, or \$0.29 per share, for the first quarter 2011.

Cash, cash equivalents and investments totaled \$57.3 million at March 31, 2012, in line with \$57.7 million at December 31, 2011. Net operating cash use for the first quarter of 2012 was \$11.7 million. Operating cash use excludes \$11.7 million in proceeds from sales of common stock through the Company's at-the-market offering (ATM) during the first quarter 2012, as well as collateral receipts/payments under the foreign currency hedge agreement.

Clinical Development Update & Outlook

- In April, BioCryst held an End of Phase 2 meeting with the FDA regarding BCX4208, which included discussions around its Phase 3 program. The proposed Phase 3 trial plan anticipates enrollment of approximately 1,800 patients and 12 months of study drug exposure; BCX4208 administration as add-on treatment to the approved xanthine oxidase (XO) inhibitors, allopurinol or febuxostat; study population of gout patients who are not adequately responding to a XO inhibitor alone; and a primary efficacy endpoint at six months of the proportion of patients with a serum uric acid (sUA) level that is <6.0 mg/dL. In addition, the Company has also initiated the Scientific Advice Process with the EMA and expects feedback in the third quarter of 2012.
- During the third quarter of 2012, BioCryst expects to complete the extension phase through 52-weeks of its randomized Phase 2b clinical trial of BCX4208 added to allopurinol in patients with gout who had failed to reach the sUA goal of <6 mg/dL on allopurinol alone. BioCryst also expects to complete its Phase 2 BCX4208 clinical trial in patients with moderate renal impairment during the third quarter. The Company has closed enrollment for this study at 20 patients.
- The company is completing Good Laboratory Practices (GLP) nonclinical safety studies of BCX5191 for hepatitis C and BCX4161 for hereditary angioedema. Both programs remain on track for the initiation of first-in-human trials before the end of the 2012. The Company has started Phase 1 planning for each drug candidate.
- BioCryst continues to enroll patients in the ongoing Phase 3 efficacy clinical trial of the influenza antiviral i.v. peramivir. The Company plans to provide an update following the planned interim analysis, which is expected after the conclusion of the 2012 Southern Hemisphere flu season.

Financial Outlook for 2012

Based upon current trends and assumptions, as well as the Company's planned operations, BioCryst continues to expect net operating cash use to be in the range of \$32 to \$38 million, and its total operating expenses to be in the range of \$57 to \$69 million. The Company's operating cash forecast excludes any potential cash inflows from out-licensing or other sources. BioCryst's 2012 financial results will be heavily dependent on peramivir-related operating expenses, which are largely a function of the rate of enrollment in the Company's ongoing Phase 3 clinical trial, which in turn is dependent on the prevalence and severity of influenza in those geographies where BioCryst has clinical sites.

Conference Call and Webcast

BioCryst's leadership team will host a conference call and webcast on Monday, May 7, 2012 at 11:00 a.m. Eastern Time to discuss these financial results and recent corporate developments. To participate in the conference call, please dial 1-877-303-8027 (United States) or 1-760-536-5165 (International). No passcode is needed for the call. The webcast can be accessed by logging onto www.BioCryst.com. Please connect to the website at least 15 minutes prior to the start of the conference call to ensure adequate time for any software download that may be necessary.

About BioCryst Pharmaceuticals

BioCryst Pharmaceuticals designs, optimizes and develops novel small molecule drugs that block key enzymes involved in infectious and inflammatory diseases. BioCryst currently has two late-stage development programs: peramivir, a viral neuraminidase inhibitor for the treatment of influenza, and BCX4208, a purine nucleoside phosphorylase (PNP) inhibitor for the treatment of gout. In addition, BioCryst is advancing two preclinical programs towards IND filings: BCX5191, a nucleoside analog inhibitor of HCV RNA polymerase (NS5B) for hepatitis C, and BCX4161, an oral inhibitor of plasma kallikrein for hereditary angioedema. Utilizing state-of-the-art structure-guided drug design and crystallography, BioCryst continues to discover innovative compounds with the goal of addressing unmet medical needs of patients and physicians. For more information, please visit the Company's website at 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 there can be no assurance that our compounds will prove effective in clinical trials; that development and commercialization of our compounds may not be successful; that BARDA/HHS may further condition, reduce or eliminate future funding of the peramivir

program; 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; that our actual cash burn rate may not be consistent with our expectations; that BioCryst 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 current reports on Form 8-K, all of which identify important factors that could cause the actual results to differ materially from those contained in our projections and forward-looking statements.

BCRXW

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BIOCRYST PHARMACEUTICALS, INC. CONSOLIDATED FINANCIAL SUMMARY (in thousands, except per share numbers)

Consolidated Statements of Operations (Unaudited)

	Three Months Ended March 31,		
	 2012		2011
Revenues:			
Collaborative and other research and development	\$ 12,221	\$	5,435
Total revenues	12,221		5,435
Expenses:			
Research and development	15,441		13,403
General and administrative	 1,781		3,531
Total expenses	17,222		16,934
Loss from operations	(5,001)		(11,499)
Interest and other income	71		102
Interest expense	(1,160)		(288)
Gain (loss) on foreign currency derivative	 38		(1,342)
Net loss	\$ (6,052)	\$	(13,027)
Basic and diluted net loss per common share	\$ (0.13)	\$	(0.29)
Weighted average shares outstanding	 47,105		44,987

Note: Legal patent costs are now classified as Research & Development expenses, whereas previously they were classified as General & Administrative expense.

Consolidated Balance Sheet Data

	(Unaudited)		
	March 31, 2012	December 31, 2011	
Cash, cash equivalents and investments	\$ 57,300	\$ 57,725	
Receivables from collaborations	5,852	5,831	
Total assets	80,085	82,208	
Non-recourse notes payable	30,000	30,000	
Accumulated deficit	(359,572)	(353,520)	
Stockholders' equity	23,150	14,806	