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: July 21, 2004

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 7. Exhibits.

Exhibit No.	**Description**
99.1	Press release dated July 21, 2004 entitled "BioCryst Reports Second Quarter 2004 Financial Results"

Item 12. Results of Operations and Financial Condition:

On July 21, 2004, the Company issued a news release announcing its financial results for the quarter ended June 30, 2004. A copy of the news release is furnished as exhibit 99.1 hereto and is incorporated by reference into Item 12 of Form 8-K.

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 21, 2004

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 July 21, 2004 entitled “BioCryst Reports Second Quarter 2004 Financial Results”

Exhibit 99.1

BIOCRYST PHARMACEUTICALS, INC.
2190 PARKWAY LAKE DRIVE
BIRMINGHAM, AL 35244
205-444-4600 205-444-4640 FAX
www.biocryst.com

Contacts:
BioCryst Pharmaceuticals, Inc.
Michael A. Darwin
Chief Financial Officer
(205) 444-4600

Euro RSCG Life NRP
Sharon Weinstein (Investors)
(212) 845-4271
Wendy Lau (Media)
(212) 845-4272

FOR IMMEDIATE RELEASE

BIOCRYST REPORTS SECOND QUARTER 2004 FINANCIAL RESULTS

Birmingham, Alabama – July 21, 2004 – BioCryst Pharmaceuticals, Inc. (Nasdaq NM: BCRX) today announced financial results for the second quarter ended June 30, 2004. The Company reported revenues of $217,000, including interest and other income, in the second quarter of 2004, compared to $266,000 in the second quarter of 2003. The net loss for the quarter ended June 30, 2004 was $5,057,000, or $0.23 per share, compared to a net loss of $3,252,000, or $0.18 per share, for the same period last year. As of June 30, 2004, the Company had cash, cash equivalents and investments of $37.9 million.

The decrease in revenues was primarily attributed to a decrease in interest and other income by 34.6% to $174,000 in the second quarter of 2004 compared to $266,000 in the second quarter of 2003. This decrease was due to the lower interest rate environment. Collaborative and other research and development revenue increased 100.0% for the quarter and year compared to the same periods in 2003, due to revenue from the National Institutes of Health related to the grant received for our hepatitis C inhibitor program.

Research and development expenses increased 46.6% to $4,348,000 in the three months ended June 30, 2004 from $2,965,000 in the three months ended June 30, 2003. The increase is primarily attributed to the costs associated with the continued development of our lead drug candidate, BCX-1777, officially known as forodesine hydrochloride. These costs include the ongoing clinical studies and manufacturing of compound on a larger scale. General and administrative expenses for the three months ended June 30, 2004 increased 67.5% to $926,000 as compared to $553,000 for the same period in 2003. This increase is primarily related to a non-cash expense related to stock options as a result of the amendment to our stock option plan, approved by the stockholders in May.

Revenues for the six months ended June 30, 2004 were $398,000, compared to $574,000 for the six months ended June 30, 2003. The net loss for the six months ended June 30, 2004 was $10,519,000, or $0.51 per share, compared to a net loss of $6,041,000 or $0.34 per share, for the same period last year. The decrease in revenues in the first six months of 2004 was due to the reduction in interest and other income as a result of a lower interest rate environment. Our expenses for the six months ended June 30, 2004 were more than the same period in 2003 in each category, due to essentially the same reasons discussed for the changes in the second quarter.

“We continued to make progress in our oncology clinical trials with forodesine during the past quarter,” said Charles E. Bugg, Chairman and Chief Executive Officer of BioCryst. “We are continuing to add clinical sites for our Phase II trial for treatment of patients with T-cell leukemia. Preliminary results to date have been encouraging, and we are also working diligently to meet our goal of initiating additional Phase I and Phase I/II trials with forodesine and with our second PNP inhibitor, BCX-4208, during the second half of this year. We plan to discuss our trials in more detail during our conference call on July 21.”

The Company will sponsor a conference call at 10:00 am EDT on Wednesday, July 21, 2004, which is open to the public. Interested investors can listen to the call live over the Internet from the investor relations website at www.biocryst.com or by dialing 1-888-231-7417, and providing the passcode number 207681.

BioCryst Pharmaceuticals, Inc. designs, optimizes and develops novel drugs that block key enzymes essential for cancer, cardiovascular and 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 lead product candidate, forodesine hydrochloride (BCX-1777), an inhibitor of purine nucleoside phosphorylase (PNP), is currently in a Phase IIa trial for patients with T-cell malignancies with additional Phase IIa trials planned for hematologic malignancies, and other refractory cancers. A second generation PNP inhibitor, BCX-4208, is in preclinical development with plans to file an IND during 2004. In addition, BioCryst has several new enzyme targets in drug discovery including

tissue factor/factor VIIa and hepatitis C polymerase. For more information about BioCryst, please visit the company's web site at www.biocryst.com.

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 BCX-1777, that the Phase I trials of BCX-1777 for treatment of patients with T-cell lymphoma and hematologic malignancies may not be successfully completed, that BioCryst may not commence as expected additional Phase II trials with BCX-1777 and Phase I studies with BCX 4208, that BCX-1777 or any of our other product candidates may not receive required regulatory clearances from the FDA, that Phase IIa clinical trials of BCX-1777 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 that is currently planned, that we may not be able to continue future development of BCX-1777 or any of our other current development programs including BCX-4208, tissue factor/factor VIIa and hepatitis C polymerase, that BCX-1777 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, which identify important factors that could cause the actual results to differ materially from those contained in the projections or forward-looking statements.

# # #

BIOCRYST PHARMACEUTICALS, INC.
FINANCIAL SUMMARY

Condensed Statements of Operations (unaudited)
(in thousands, except per share)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2004	**2003**	**2004**	**2003**
Revenues:				
Collaborative and other research and development	$ 43	$ 0	$ 43	$ 0
Interest income and other	174	266	355	574
Total revenues	217	266	398	574
Expenses:				
Research and development	4,348	2,965	9,331	5,454
General and administrative	926	553	1,586	1,161
Total expenses	5,274	3,518	10,917	6,615
Net loss	$ (5,057)	$ (3,252)	$ (10,519)	$ (6,041)
Net loss per share	$ (0.23)	$ (0.18)	$ (0.51)	$ (0.34)
Weighted average shares outstanding	21,618	17,666	20,602	17,664

Balance Sheet Data (in thousands)

	June 30, 2004 (Unaudited)	**December 31, 2003 (Audited)**
Cash, cash equivalents and securities	$ 37,866	$ 25,732
Total assets	41,765	30,096
Accumulated deficit	(115,179)	(104,660)
Stockholders' equity	39,407	28,447