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): June 28, 2011

BioCryst Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 000-23186 (Commission File Number) 62-1413147 (I.R.S. Employer Identification No.)

4505 Emperor Blvd., Suite 200, Durham, North Carolina (Address of Principal executive offices) 27703 (Zip Code)

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

Not Applicable

(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)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Dere-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 June 28, 2011, BioCryst Pharmaceuticals, Inc. ("BioCryst") entered into an at market issuance sales agreement (the "Sales Agreement") with McNicoll, Lewis & Vlak LLC ("MLV"), pursuant to which BioCryst may issue and sell shares of its common stock through MLV as BioCryst's sales agent for aggregate gross proceeds not to exceed the amount that can be sold under its Registration Statement on Form S-3 (File No. 333-175182) filed with the Securities and Exchange Commission (the "SEC") on June 28, 2011, which amount, as of the date hereof, is \$70,000,000. No sales will be made until such registration statement is declared effective by the SEC.

Sales of BioCryst's common stock through MLV, if any, will be made on the NASDAQ Global Select Market, on any other existing trading market for the common stock or to or through a market maker. Subject to the terms and conditions of the Sales Agreement, MLV will use commercially reasonable efforts to sell BioCryst's common stock from time to time, based upon BioCryst's instructions (including any price, time or size limits or other customary parameters or conditions BioCryst may impose). BioCryst will pay to MLV in cash, upon the sale of common stock pursuant to the Sales Agreement, an amount equal to (i) 3.0% of the gross proceeds from the sale of the first \$30 million of shares of common stock, or (ii) 2.0% of the gross proceeds from the sale of any additional shares of common stock. BioCryst has also provided MLV with customary indemnification rights.

The foregoing description of the Sales Agreement is not complete and is qualified in its entirety by reference to the full text of such agreement, a copy of which is incorporated herein by reference to Exhibit 1.2 to BioCryst's Form S-3 filed June 28, 2011 (File No. 333-175182).

Item 9.01 Financial Statements and Exhibits.

(d) The following exhibits are being filed with this Current Report on Form 8-K.

Exhibit Number

Description

- 10.1 At Market Issuance Sales Agreement, dated June 28, 2011, by and between BioCryst Pharmaceuticals, Inc. and McNicoll, Lewis & Vlak LLC (incorporated herein by reference to Exhibit 1.2 to BioCryst's Registration Statement on Form S-3 filed June 28, 2011 (File No. 333-175182)).
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SIGNATURE

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.

BioCryst Pharmaceuticals, Inc.

By: /s/ Alane Barnes

Name: Alane Barnes Title: General Counsel, Corporate Secretary

Date: July 1, 2011

EXHIBIT INDEX

Description

10.1

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