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): March 7, 2016

BioCryst Pharmaceuticals, Inc. (Exact Name of Registrant as Specified in Charter)

Delaware (State or Other Jurisdiction of Incorporation)

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000-23186 (Commission File Number) **62-1413174** (I.R.S. Employer Identification Number)

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

(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:

] 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))

Item 8.01. Other Events.

On March 7, 2016, BioCryst Pharmaceuticals, Inc. (the "Company") announced that results from a preclinical study of its broad spectrum antiviral BCX4430 in immune-deficient mice infected with Zika virus will be presented at a World Health Organization (WHO) meeting scheduled to take place March 7-9 in Geneva, Switzerland.

On March 7, 2016, the Company issued a news release announcing the events described in this Item 8.01. A copy of the news release is filed as Exhibit 99.1 hereto and is incorporated herein by reference.

Forward-Looking Statements

This Current Report 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 BioCryst's 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 are 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 BioCryst or its licensees may not be able to enroll the required number of subjects in planned clinical trials of BCX4430 and that such clinical trials may not be successfully completed; that the Company or its licensees may not commence as expected additional pre-clinical studies or human clinical trials may not be commenced as expected or such studies may not be successfully completed; that the FDA may require additional studies beyond those planned for BCX4430, or may not provide regulatory clearances which may result in delay of planned clinical trials, or may impose a clinical hold on BCX4430, or withhold market approval for product candidates; that the Company may not be able to obtain additional funding for BCX4430; that government funding or other contracts for BCX4430 may have certain terms and conditions, including termination provisions, that subject the Company to additional risks; that the Company may lose current funding for the program; that its actual financial results may not be consistent with its expectations, including that 2016 operating expenses and cash usage may not be within management's expected ranges. 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 BioCryst's projections and forward-looking statements.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit No. Description

99.1 Press Release dated March 7, 2016 entitled "Study Results from Zika Virus Infected Mice Treated with BXC4430 to be Presented at WHO Conference"

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.

Date: March 7, 2016

By: <u>/s/ Alane Barnes</u> Name: Alane Barnes Title: Vice President, General Counsel, and Corporate Secretary

EXHIBIT INDEX

ExhibitNo.Description

99.1 Press Release dated March 7, 2016 entitled "Study Results from Zika Virus Infected Mice Treated with BXC4430 to be Presented at WHO Conference"

Study Results From Zika Virus Infected Mice Treated With BCX4430 to be Presented at WHO Conference

RESEARCH TRIANGLE PARK, N.C., March 07, 2016 (GLOBE NEWSWIRE) -- BioCryst Pharmaceuticals, Inc. (NASDAQ:BCRX) today announced that results from a preclinical study of its broad spectrum antiviral BCX4430 in immunedeficient mice infected with Zika virus will be presented at a World Health Organization (WHO) meeting scheduled to take place March 7-9 in Geneva, Switzerland.

The primary goal of the study was to assess the effect of BCX4430 treatment on survival through Day 28 in immune-deficient mice infected with the Zika virus. BCX4430 was administered by intramuscular (I.M.) injection twice a day beginning four hours prior to virus challenge and continuing for eight days; two dose levels were tested. In the standard dose BCX4430 group, 7 of 8 mice survived through Day 28. In the low dose BCX4430 group (n=8), and in control groups administered vehicle placebo (n=8) or ribavirin at two dose levels (n=16), no animals survived to Day 28. Overall survival for the standard dose level of BCX4430 was superior to both the placebo and the ribavirin treatment control groups (p < 0.0001). For both dose levels of BCX4430, median survival was superior to both control groups (>28 days for BCX4430 standard dose and 23 days for low dose) compared to 14 to 17 days for controls.

This study was conducted at Utah State University, under the ongoing Animal Models of Infectious Disease Program at the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health. This program provides *in vivo* screening services for researchers, as part of a broader suite of preclinical services supported by NIAID. These services are part of NIAID's infrastructure for responding to emerging infectious diseases, such as Zika virus, and allow for research to be quickly directed to support immediate public health needs.

BCX4430 is a broad spectrum antiviral that is being tested in a Phase 1 clinical safety and pharmacology study in healthy subjects. BCX4430 has demonstrated survival benefits in nonclinical studies against a variety of serious pathogens, including Ebola, Marburg, and Yellow Fever viruses. Since September 2013, NIAID has supported BioCryst in developing BCX4430 as a therapeutic for Ebola and Marburg viruses under Contract No. HHSN272201300017C.

In March 2015, the Biomedical Advanced Research and Development Authority (BARDA) within the U.S. Department of Health and Human Services' Office of the Assistant Secretary for Preparedness and Response (ASPR) awarded BioCryst a contract, HHSO100201500007C, for up to an additional \$35 million for the continued development of BCX4430 as a potential treatment for filoviruses.

About the BSAV Program & BCX4430

BCX4430 is an RNA dependent-RNA polymerase inhibitor that has demonstrated broad-spectrum activity *in vitro* against more than 20 RNA viruses in nine different families, including filoviruses, togaviruses, bunyaviruses, arenaviruses, paramyxoviruses, coronaviruses and flaviviruses. BioCryst is developing BCX4430 in collaboration with NIAID and the Biomedical Advanced Research and Development Authority (BARDA), following the Animal Rule regulatory pathway.

About BioCryst Pharmaceuticals

BioCryst Pharmaceuticals designs, optimizes and develops novel small molecule drugs that block key enzymes involved in rare diseases. BioCryst's ongoing development programs include oral plasma kallikrein inhibitors for hereditary angioedema, avoralstat, BCX7353 and other second generation compounds, and BCX4430, a broad spectrum viral RNA polymerase inhibitor. 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 BioCryst's 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 are 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 BioCryst or its licensees may not be able to enroll the required number of subjects in planned clinical trials of BCX4430 and that such clinical trials may not be successfully completed; that the Company or its licensees may not commence as expected additional pre-clinical studies or human clinical trials may not be commenced as expected or such studies may not be successfully completed; that the FDA may require additional studies beyond those planned for BCX4430, or may not provide regulatory clearances which may result in delay of planned clinical trials, or may impose a clinical hold on BCX4430, or withhold market approval for product candidates; that the Company may not be able to obtain additional funding for BCX4430; that government funding or other contracts for BCX4430 may have certain terms and conditions, including termination provisions, that subject the Company to additional risks; that the Company may lose current funding for the program; that its actual financial results may not be consistent with its expectations, including that 2016 operating expenses and cash usage may not be within management's expected ranges. 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 BioCryst's projections and forward-looking statements.

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