BioCryst Announces Promising Results from Preclinical Studies of BCX5191 for Hepatitis C

- ***BCX5191: Planning to file for first—in-human studies during the fourth quarter 2012***
- ***BioCryst to discuss study outcomes during its 2011 results call February 16 at 11:00 a.m. ET***

RESEARCH TRIANGLE PARK, N.C.--(BUSINESS WIRE)-- BioCryst Pharmaceuticals, Inc. (NASDAQ: BCRX) today announced favorable preclinical results for BCX5191, a novel adenine nucleoside analog targeting viral RNA polymerase for the potential treatment of hepatitis C.

BioCryst has successfully completed *in vitro* and *in vivo* studies in which BCX5191 exhibited potent and selective pan-genotypic antiviral activity against the hepatitis C polymerase enzyme. BCX5191 showed no inhibition of human RNA polymerase and no evidence of toxicity from standard *in vitro* screens.

Human liver cells rapidly and efficiently convert BCX5191 into its active triphosphate form. BCX5191 does not require prodrug technology to achieve bioavailability. BCX5191 inhibits the viral RNA polymerase enzyme across genotypes 1-4 at sub-micromolar concentrations (0.05-0.36 µM) and is active in replicon cell assays for genotypes 1a and 1b.

In preclinical models, BCX5191 demonstrates high oral bioavailability, and the drug is actively transported into the liver. Following a single oral dose in rats, liver BCX5191 triphosphate levels exceed the IC_{50} values for genotypes 1-4 through 24 hours. At C_{max}, the drug triphosphate level is more than 100 times the IC_{50}. This pharmacokinetic profile is expected to support once-daily dosing in clinical studies.

"BCX5191 has met stringent preclinical criteria to advance to IND-enabling studies. We expect this program to be ready to file for first-in-human studies during the fourth quarter of 2012," said Dr. William P. Sheridan, Senior Vice President & Chief Medical Officer of BioCryst Pharmaceuticals. "Based on our internal comparative preclinical studies of BCX5191 with the most advanced nucleotide analog in clinical development, GS-7977, we believe BCX5191 has the potential to be the backbone of best-in-class oral treatment regimens for hepatitis C patients."

Additional BCX5191 non-clinical experiments are ongoing or planned, including Good Laboratory Practices (GLP) non-clinical safety studies and *in vitro* evaluation of BCX5191 in combination with ribavirin.

Conference Call and Webcast

BioCryst's leadership team will host a conference call and webcast on Thursday, February 16, 2012 at 11:00 a.m. Eastern Time to discuss financial results and recent corporate developments, including results from the BCX5191 hepatitis C program. 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 and accompanying slides can be accessed by logging onto www.BioCryst.com. Accompanying slides will be available on the BioCryst website several hours prior to the call. 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 Hepatitis C

Hepatitis C is a contagious liver disease that results from infection with the hepatitis C virus (HCV), which is the most common virus that infects the liver and can lead to life-threatening liver problems, such as liver damage, cirrhosis, liver failure or liver cancer. There are an estimated 170 million individuals worldwide who are chronically infected with HCV, and about 3 to 4 million people are infected annually. In the United States, there are approximately 4 million people who have chronic hepatitis C.

About BioCryst

BioCryst Pharmaceuticals designs, optimizes and develops novel small-molecule pharmaceuticals that block key enzymes involved in infectious diseases, inflammatory diseases and cancer. BioCryst currently has three novel late-stage compounds in development: peramivir, a neuraminidase inhibitor for the treatment of influenza, BCX4208, a purine nucleoside phosphorylase (PNP) inhibitor for the treatment of gout, and forodesine, an orally-available PNP inhibitor for cancer, which is being developed by Mundipharma under a global license agreement. Utilizing crystallography and structure-guided drug design, BioCryst

continues to discover additional compounds and to progress others through preclinical and early development to address the 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 studies; that development and commercialization of our compounds may not be successful; 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 human clinical trials with BCX5191; 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 reach favorable agreements with potential pharmaceutical and biotechnology partners for further development of BCX5191; that our actual cash burn rate may not be consistent with our expectations; 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, 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.

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