BIOCRYST ANNOUNCES FILING OF SPECIAL PROTOCOL ASSESSMENT FOR FODOSINE™ IN THE TREATMENT OF RELAPSED OR REFRACTORY T-CELL LEUKEMIA

BioCryst Announces Filing of Special Protocol Assessment For Fodosine™ In The Treatment of Relapsed or Refractory T-Cell Leukemia

Birmingham, AL – October 17, 2005 - BioCryst Pharmaceuticals, Inc. (Nasdaq: BCRX) today announced that the company has filed a Special Protocol Assessment (SPA) with the U.S. Food and Drug Administration (FDA) for the design of a proposed registration trial of Fodosine™ (forodesine hydrochloride), the company's lead transition-state analog inhibitor of purine nucleoside phosphorylase (PNP). The proposed trial will evaluate the efficacy and safety of Fodosine™ in patients with relapsed or refractory T-cell leukemia.

About BioCryst

BioCryst Pharmaceuticals, Inc. designs, optimizes and develops novel drugs that block key enzymes involved in cancer, cardiovascular diseases, 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, Fodosine™, is a transition-state analog inhibitor of the target enzyme purine nucleoside phosphorylase (PNP). The drug is currently in a Phase IIa trial for patients with T-cell leukemia and a combination IV and oral Phase I pharmacokinetic trial in healthy volunteers. Results of the Phase IIa and the Phase I pharmacokinetic trial will assist in the design of a planned combination IV and oral Phase IIb pivotal clinical trial in patients with T-cell leukemia. Additionally, Fodosine™ is currently being studied in a Phase I trial with an oral formulation in cutaneous T-cell lymphoma (CTCL) and a Phase II trial in chronic lymphocytic leukemia (CLL). BioCryst also plans to initiate a Phase I/II trial in B-cell acute lymphoblastic leukemia during 2005. Fodosine™ has been granted Orphan Drug status by the U.S. Food and Drug Administration for three indications: T-cell non-Hodgkin's lymphoma, including CTCL; CLL and related leukemias including T-cell prolymphocytic leukemia, adult T-cell leukemia, and hairy cell leukemia; and for treatment of acute lymphoblastic leukemia (ALL).

Additionally the FDA has granted "fast track" status to the development of Fodosine™ for the treatment of relapsed or refractory T-cell leukemia. A Phase Ib study with BioCryst's second-generation PNP inhibitor, BCX-4208, was recently initiated and is being conducted with the goal of initiating a Phase I/II study in patients with psoriasis in late 2005 or early 2006. In addition, BioCryst has drug candidates for two enzyme targets in preclinical testing, including hepatitis C polymerase and influenza neuraminidase and is also focusing on the target tissue factor/factor VIIa with a program at the discovery stage. For more information about BioCryst, please visit the company's web site at http://www.biocryst.com.

Forward-looking statements

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 Fodosine™ or BCX-4208, that each of the Phase IIa trial for patients with T-cell leukemia, Phase I trial of BCX-4208, the Phase I trial of Fodosine™ for treatment of patients with cutaneous T-cell lymphoma and the Phase II trial of Fodosine™ for advanced fludarabine-refractory CLL may not be successfully completed, that BioCryst may not commence as expected additional trials with Fodosine™ and with BCX-4208, that Fodosine™, BCX-4208, or any of our other product candidates may not receive required regulatory clearances from the FDA, that Phase IIa clinical trials of Fodosine™ may not show the drug is effective over the 6-week period, that ongoing and future clinical trials may not have positive results, that we may not be able to obtain a Special Protocol Assessment or otherwise be able to complete successfully the Phase IIb trial that is currently planned to be pivotal, that we may not be able to continue future development of Fodosine™, BCX-4208 or any of our other current development programs including influenza neuraminidase, tissue factor/factor VIIa and hepatitis C polymerase, that Fodosine™, BCX-4208 or our other 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 biotech partners for further development of its product

candidates, 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, which identify important factors that could cause the actual results to differ materially from those contained in the projections or forward-looking statements.

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