



DATA PRESENTED AT 2007 ASH MEETING DEMONSTRATE ACTIVITY OF FORODESINE HCL AS A SINGLE AGENT OR IN COMBINATION WITH BENDAMUSTINE IN CERTAIN TYPES OF LEUKEMIA AND LYMPHOMA

Birmingham, Alabama - December 14, 2007 - BioCryst Pharmaceuticals, Inc. (Nasdaq: BCRX) today reported clinical trial and in vitro data evaluating forodesine HCl, the Company's lead anti-cancer compound, in the treatment of certain types of leukemias and lymphomas.

Madeline Duvic, M.D., Deputy Chair, Dermatology, The University of Texas M.D. Anderson Cancer Center presented interim data from the Phase I/II clinical study of oral forodesine HCl in the treatment of subjects with refractory cutaneous T-cell lymphoma (CTCL). The open-label, multi-center, dose-escalation trial further evaluated oral forodesine HCl at the optimal biologic dose in 36 subjects with refractory CTCL. The overall response rate for these subjects was 39%, including 2 subjects with complete response (6%) and 12 subjects with partial response (33%). For those patients with erythroderma at baseline, 65% of patients had significant improvement in erythroderma. These data concluded that in addition to a good safety profile, forodesine HCl demonstrated clinical activity as a single oral agent in patients with advanced refractory CTCL. These data supplement information previously presented at the 2006 ASH meeting. BioCryst is currently enrolling subjects in a pivotal trial of forodesine HCl for the treatment of CTCL.

Additionally, Roberto Alonso Gil, Ph.D., Hematopathology Unit, Clinic Hospital of Barcelona presented a poster detailing the in vitro activity of forodesine HCl and the synergistic in vitro activity of forodesine HCl with bendamustine in primary cells from 29 patients with chronic lymphocytic leukemia (CLL). Forodesine HCl alone induced apoptosis regardless of the ZAP-70 and p53 status. In addition, a significant synergistic effect was observed with the combination of forodesine HCl and bendamustine in these in vitro experiments.

"We believe the encouraging clinical data presented by Dr. Duvic support the further development of forodesine HCl as a single agent and further validate our ongoing pivotal trial in patients with CTCL," said Jon P. Stonehouse, President and CEO of BioCryst. "Additionally, the data from Dr. Gil's laboratory suggest a therapeutic potential for forodesine HCl as a single agent as well as in combination with bendamustine as potentially effective therapeutic options in the treatment of CLL."

About BioCryst

BioCryst Pharmaceuticals, Inc. is a leader in the use of crystallography and structure-based drug design for the development of novel therapeutics to treat cancer, cardiovascular diseases, autoimmune diseases, and viral infections. The company is advancing multiple internal programs toward potential commercialization including forodesine HCl in oncology, BCX-4208 in transplantation and autoimmune diseases and peramivir in seasonal and life-threatening influenza. BioCryst has a worldwide partnership with Roche for the development and commercialization of BCX-4208, and is collaborating with Mundipharma for the development and commercialization of forodesine HCl in markets across Europe, Asia, Australia and certain neighboring countries. In January, 2007 the U.S. Department of Health and Human Services (DHHS) awarded a \$102.6 million, four-year contract to BioCryst for advanced development of peramivir to treat seasonal and life-threatening influenza. In February 2007 BioCryst established a partnership with Shionogi & Co., to develop and commercialize peramivir in Japan. For more information about BioCryst, please visit the company's web site at <http://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 our belief that many subjects in the Phase II clinical trials of peramivir did not receive adequate dosing by i.m. injection may not be correct, that final results and analysis of the peramivir Phase II trial may differ from the preliminary results and analysis, that the additional pharmacokinetic studies and virology analysis being performed on peramivir may not support our post hoc analysis of the Phase II results, that DHHS and the FDA may not agree with our analysis, that DHHS may further condition, reduce or eliminate future funding of the peramivir program, that we may not commence in timely fashion or at all the planned pivotal trial for peramivir and if commenced, it may not be successful, that the pivotal trial with forodesine HCl in CTCL may not meet its endpoint, that the Phase II trial of BCX-4208 for psoriasis may not be

successfully completed, that development and commercialization of forodesine HCl in CTCL 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 additional human clinical trials with our product candidates, that our product candidates may not receive required regulatory clearances from the FDA, that ongoing and future clinical trials may not have positive results, that we may not be able to announce preclinical developments for additional compounds by year-end 2007 as currently proposed, 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 biotech partners for further development of its product candidates, that our projected 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, most recent Registration Statement on Form S-3 (File No. 333-145638), Quarterly Reports on Form 10-Q, 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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