



ST. JUDE STUDY SHOWS EFFECTIVENESS OF PERAMIVIR IN PREVENTION OF MORTALITY IN MOUSE MODEL OF AVIAN INFLUENZA H5N1 VIRUS INFECTION

BIOCRYST SAYS STUDY CONFIRMS AND EXTENDS EVIDENCE SEEN IN A PREVIOUS STUDY

Birmingham, Alabama – May 2, 2007 - BioCryst Pharmaceuticals, Inc. (Nasdaq: BCRX) today announced that investigators at St. Jude Children's Research Hospital, Memphis, TN, reported favorable results evaluating peramivir treatment in an animal model of influenza using a highly virulent strain of H5N1 virus (an avian influenza strain that had caused fatal human infection in Viet Nam). The study, presented on April 30, 2007 by Dr. David Boltz at the 20th International Conference on Antiviral Research, Palm Springs, CA, concluded that peramivir is an effective treatment when administered intramuscularly to control H5N1 infection in mice and that these data support the potential use of this drug to control influenza in the event of a pandemic.

The objective of the study was to achieve complete protection against lethal H5N1 influenza virus infection in the mouse model through the use of intramuscular administration of peramivir, a potent neuraminidase inhibitor with antiviral activity against strains of influenza viruses, including seasonal strains and influenza H5N1 strains from avian origins.

A survival rate of 40% to 60% was observed in mice treated with one or two injections of peramivir; however, 100% survival of mice was achieved by two injections of peramivir on the first day followed by once-daily administration for 7 days. The longer duration of peramivir treatment also prevented viral replication in the tissues of the lungs, brain and spleen of the mice at the 3, 6, and 9 day post-inoculation time points.

W. James Alexander, MD, MPH, BioCryst Senior Vice President for Clinical Operations commented, "The results of this St. Jude study, performed under the careful guidance of Drs. Elena Govorkova and Robert Webster, bolsters our confidence that peramivir may be clearly beneficial in the treatment of severe influenza, including human influenza due to strains of avian origin. We wish to congratulate our colleagues at St. Jude on the successful conduct of an elegant study which not only confirms but significantly extends the observations of the previous animal study reported last year by NIH showing positive effects of peramivir in a similar model of H5N1 influenza virus infection."

BioCryst is advancing the clinical development of peramivir under terms of a contract from the U.S. Department of Health and Human Services (DHHS) which on January 4, 2007 awarded BioCryst a \$102.6 million, four-year contract to develop peramivir for the treatment of seasonal and life-threatening influenza. Funding from the contract will support manufacturing of clinical lots, process validation, clinical studies and other product approval requirements needed for U.S. licensure. BioCryst retains 100% development and commercialization rights to peramivir worldwide other than in Japan and Korea where BioCryst recently established strategic partnerships with Shionogi & CO. in Japan, and Green Cross in Korea.

About Peramivir

Peramivir is a member of the class of antiviral agents that inhibit influenza viral neuraminidase, an enzyme that is essential for the spread of influenza virus within the host. Peramivir is an inhibitor of influenza A and B neuraminidases and certain strains of influenza viruses that may be resistant to available neuraminidase inhibitors are susceptible to peramivir in laboratory tests. At the 46th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy in September, 2006, data were presented showing that injectable formulations of peramivir were safely administered to healthy subjects at daily doses up to approximately 600 mg. At the same meeting, animal data were presented showing peramivir promoted survival in animals infected with highly pathogenic strains of the H5N1 virus. Peramivir injection has received Fast Track designation from US FDA and the availability of an intravenous neuraminidase inhibitor may be important in treating patients hospitalized with severe and potentially life-threatening influenza. The availability of an intramuscular formulation of peramivir could ensure appropriate dosing which may be a concern with currently available oral or inhaled anti-influenza agents.

About Influenza

The influenza virus causes an acute viral disease of the respiratory tract. Unlike the common cold and some other respiratory infections, seasonal flu can cause severe illness, resulting in life-threatening complications. According to the Centers for Disease Control and Prevention, every year in the United States more than 200,000 people are hospitalized from flu complications, and about 36,000 people die from flu. Most at risk are young children, the elderly, and people with seriously compromised immune systems.

Avian influenza A viruses of H5N1 subtype are circulating among birds worldwide, the virus is considered extremely contagious in fowl. It is believed that all species of birds are susceptible to avian influenza, but domestic poultry, including chickens and turkeys, are among the more susceptible to the highly pathogenic strain. According to the World Health Organization, at least 261 people have contracted H5N1 avian influenza, of which at least 157 have died. Almost all of these infections are believed to have resulted from contact with infected poultry.

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 Fodosine™ 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 Fodosine™ 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 the favorable results of peramivir in animals may not be replicated in humans, that development and commercialization of Fodosine™ in both ALL and CTCL may not be successful, that we may not resolve satisfactorily the particulate matter issue with the intravenous formulation of Fodosine™, that we may not obtain a satisfactory SPA for Fodosine™ for treatment of CTCL promptly or at all, that DHHS could reduce or eliminate funding for peramivir, 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 complete successfully the Phase IIb trial for Fodosine™ that is currently planned to be pivotal, 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 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, 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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