Alnylam Awarded Federal Grant to Develop RNAi Therapeutics for Pandemic Flu

CAMBRIDGE, Mass.--(BUSINESS WIRE)--Sept. 6, 2006--Alnylam Pharmaceuticals, Inc. (Nasdaq: ALNY), a leading RNAi therapeutics company, announced today that the National Institute of Allergy and Infectious Diseases (NIAID), a division of the National Institutes of Health (NIH), has awarded the company a Small Business Innovation Research (SBIR) grant to advance the development of RNAi therapeutics for pandemic influenza. The SBIR grant will provide Alnylam with approximately $590,000 in funding over a one-year period to support the company's research efforts on small interfering RNAs (siRNAs), the molecules that mediate RNAi, as anti-viral drugs with broad spectrum activity toward multiple influenza strains including the H5N1 virus.

"This grant recognizes the potential of RNAi therapeutics as a new class of anti-viral drugs for the treatment and prevention of highly virulent strains of flu and the promising pre-clinical data emerging from our flu program," said John Maraganore, Ph.D., President and Chief Executive Officer of Alnylam. "This grant also represents a continuation of our ongoing public sector-private sector partnership to advance RNAi therapeutics for pandemic flu. In addition to this grant from the NIAID, we have submitted a response to the Request for Proposal from the Department of Health and Human Services for advanced development of new anti-viral agents for influenza."

Alnylam's flu program, partnered with Novartis, is focused on the development of RNAi therapeutics targeting sequences that are common to all flu genomes, including those of avian origin such as the H5N1 strain. Earlier this year, Alnylam scientists and academic collaborators demonstrated in vitro anti-viral activity toward a human clinical isolate of the H5N1 virus. These potent effects toward H5N1 were achieved with multiple siRNAs that also showed anti-viral activity toward other flu strains. The alliance's lead RNAi therapeutic candidate, ALN-FLU01, is comprised of two siRNAs that target distinct, highly conserved gene sequences of the flu genome. Studies for the flu program are currently being conducted under ongoing research collaborations with the University of Georgia and St. Jude Children's Research Hospital. The company has received initial government funding for its pandemic flu program from the Department of Defense's "Defense Advanced Research Projects Agency" (DARPA). In addition, Alnylam has the support of Dowpharma(SM) contract manufacturing services, a business unit of The Dow Chemical Company, relating to the manufacture of an RNAi therapeutic for pandemic flu, creating the opportunity for domestic production.

About Pandemic Influenza

An influenza pandemic is a global outbreak of disease that occurs when a new flu virus appears in the human population, causes serious illness, and spreads easily from person to person. Experts believe that current vaccines and existing anti-viral agents may not be sufficient to protect against newly emerging strains of influenza virus. Over the last several years, a highly virulent new strain of avian flu (H5N1) has become endemic in the poultry population in Southeast Asia, has spread to parts of Europe and Africa, and has caused significant mortality in humans that have been infected. The World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) have expressed major concern about the potential for this virus to mutate into a form that could cause a global pandemic of human disease.

About RNA Interference (RNAi)

RNA interference, or RNAi, is a naturally occurring mechanism within cells for selectively silencing and regulating specific genes. Since many diseases are caused by the inappropriate activity of specific genes, the ability to silence genes selectively through RNAi could provide a new way to treat a wide range of human diseases. RNAi is induced by small, double-stranded RNA molecules. One method to activate RNAi is with chemically synthesized small interfering RNAs, or siRNAs, which are double-stranded RNAs that are targeted to a specific disease-associated gene. The siRNA molecules are used by the natural RNAi machinery in cells to cause highly targeted gene silencing.

About Alnylam

Alnylam is a biopharmaceutical company developing novel therapeutics based on RNA interference, or RNAi. The company is applying its therapeutic expertise in RNAi to address significant medical needs, many of which cannot effectively be addressed with small molecules or antibodies, the current major classes of drugs. Alnylam is building a pipeline of RNAi therapeutics; its lead program is in Phase I human clinical trials for the treatment of respiratory syncytial virus (RSV) infection, which is the leading cause of hospitalization in infants in the U.S. The company's leadership position in fundamental patents, technology, and know-how relating to RNAi has enabled it to form major alliances with leading companies including Merck, Medtronic, and Novartis. The company, founded in 2002, maintains global headquarters in Cambridge, Massachusetts, and has an additional operating unit in Kulmbach, Germany. Alnylam is honored to be the "emerging/mid-cap" company recipient of the 2006 James D. Watson Helix Award, the biotechnology industry's award for outstanding achievement. For more information, visit

www.alnylam.com.

Alnylam Forward-Looking Statements

Various statements in this release concerning our future expectations, plans, and prospects, including our plans with respect to the discovery and development of an RNAi therapeutic for pandemic influenza, constitute forward-looking statements for the purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including risks related to: our approach to discover and develop novel drugs, which is unproven and may never lead to marketable products; obtaining, maintaining and protecting intellectual property utilized by our products; our ability to enforce our patents against infringers and to defend our patent portfolio against challenges from third parties; our ability to obtain additional funding to support our business activities; our dependence on third parties for development, manufacture, marketing, sales, and distribution of products; the successful development of our product candidates, all of which are in early stages of development; obtaining regulatory approval for products; competition from others using technology similar to ours and others developing products for similar uses; our dependence on collaborators; and our short operating history; as well as those risks more fully discussed in the "Risk Factors" section of our most recent report on Form 10-Q on file with the Securities and Exchange Commission. In addition, any forward-looking statements represent our views only as of today and should not be relied upon as representing our views as of any subsequent date. Alnylam does not assume any obligation to update any forward-looking statements.

CONTACT: Investors:
Alnylam Pharmaceuticals, Inc.
Cynthia Clayton, 617-551-8207
or
Media:
KMorrisPR
Kathryn Morris, 845-635-9828
SOURCE: Alnylam Pharmaceuticals, Inc.