Isis Pharmaceuticals' Ibis Program Receives \$6 Million Grant from the CDC for Infectious Disease Surveillance

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CARLSBAD, Calif., Oct. 7 /PRNewswire-FirstCall/ -- Isis Pharmaceuticals, Inc. (Nasdaq: ISIS) confirmed today that its Ibis™ program received a three-year grant for up to \$6 million from the Centers for Disease Control and Prevention (CDC) to develop and apply its diagnostic technology to the surveillance of human and animal infectious disease in the U.S. The CDC announced the award of this grant on Friday, October 3.

"Our diagnostic technology has the ability to broadly and rapidly identify infectious organisms in a complex mixture without culture techniques. This unique attribute makes the lbis technology ideal for public health agencies interested in identifying newly emerging infectious diseases or tracking the circulation of specific strains of known organisms," said David J. Ecker, Ph.D., President of lbis. "We are enthusiastic about our new relationship with the CDC, which leverages technology we developed with support from the Department of Defense for new public health applications. This collaboration with the CDC is an important next step in advancing lbis technology towards commercialization."

In October 2001, the Defense Advance Research Projects Agency (DARPA) commissioned Ibis to design a sensor for environmental surveillance capable of detecting a biological attack. DARPA continues to fund the ongoing development of Ibis' biosensor, called Triangulation Identification Genetic Evaluation of biological Risks (TIGER). This research program combines Ibis' expertise in microbial genome sequence analysis and advanced mass spectrometry technology with San Diego-based Science Applications International Corporation's advanced signal processing capabilities.

Using the grant from the CDC, Ibis will develop and provide diagnostic technology for CDC appointed priority projects focused on human and animal emerging infectious diseases and biodefense. For example, Ibis technology could be used for the identification of newly emerging infectious agents such as the SARS coronavirus, monkeypox virus, West Nile virus or drug-resistant bacteria.

About the Ibis Program

Ibis scientists have expanded on Isis' RNA-based drug discovery and development expertise in order to revolutionize the detection and treatment of infectious diseases. The program's goals are to create a sensor to detect biological agents and to develop small molecule antibacterial and antiviral drugs that bind to RNA. To accomplish these tasks, Ibis scientists integrate functional genomics, bioinformatics and RNA-focused chemistry programs with novel high-throughput, mass spectrometry-based screening methods.

About Isis Pharmaceuticals, Inc.

Isis Pharmaceuticals, Inc., is exploiting its expertise in RNA to discover and develop novel human therapeutic drugs. The company has successfully commercialized the world's first antisense product, and has 11 antisense products in development. In the company's GeneTrove™ program, Isis uses antisense technology as a tool to determine the function of genes and uses that information to direct the company's internal drug discovery research and that of its corporate partners. Through its Ibis Therapeutics program, Isis is developing a novel diagnostic tool to detect infectious organisms and is focused on the discovery of small molecule drugs that bind to RNA. As an innovator in RNA-based drug discovery and development, Isis is the owner or exclusive licensee of more than 1,200 issued patents worldwide. Additional information about Isis is available at <u>www.isispharm.com</u>.

This press release contains forward-looking statements concerning Isis' Ibis program and its prospects, planned development activities and therapeutic potential for the company's products. Any statement describing a goal, expectation, intention or belief of the company is a forward-looking statement and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those inherent in the process of discovering, developing and commercializing diagnostic technology and drugs that are safe and effective for use as human therapeutics and financing such activities. Actual results could differ materially from those projected in this release. As a result, you are cautioned not to rely on these forward-looking statements. These and other risks concerning Isis' research and development programs are described in additional detail on Form 10-Q for the period ended June 30, 2003, which is on file with the U.S. Securities and Exchange Commission, copies of which are available from the company.

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