

## **Isis Pharmaceuticals' Ibis Therapeutics Division Awarded New \$2.4 Million Government Contract to Advance Its Antibacterial Drug Discovery Program**

April 4, 2002

CARLSBAD, Calif., April 4 /PRNewswire-FirstCall/ -- Isis Pharmaceuticals, Inc. (Nasdaq: ISIS) announced today that its Ibis Therapeutics™ division has successfully transitioned its government-sponsored research program to discover novel antibacterial drugs for biological warfare defense to the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID). Through this transition, Ibis has achieved a new three-year contract valued at up to \$2.4 million from USAMRIID to advance the division's work in developing therapeutic countermeasures to biological warfare. This contract builds on Ibis' earlier research programs with the Defense Advanced Research Projects Agency (DARPA). Transition from DARPA to other government agencies for later stage program development is a direct result of agency selection and demonstration of a successful initiative.

"We are honored and enthusiastic that USAMRIID has elected to be the transition partner to fund this research project, which originally started with DARPA. USAMRIID is the ideal collaborator for this initiative, as the organization focuses on research to develop vaccines, drugs and diagnostics for biological weapons defense," said David J. Ecker, Ph.D., President of Ibis Therapeutics. "Our discovery efforts could have potential application beyond government use, for which Ibis retains the commercial rights."

The goal of the USAMRIID contract is to advance antimicrobial compounds from leads discovered during two previous DARPA programs. The studies, initiated in 1997 and 1999, created a strategy to identify structured regions within RNA common to a wide range of infectious pathogens. Ibis successfully identified a number of proprietary targets and made significant advances in RNA-targeted drug design, and will now focus on the next stage of the antibacterial drug discovery process. With this award, Ibis has received government-funded contracts totaling more than \$20 million.

Ibis Therapeutics has developed a novel program focused on the discovery of low molecular weight, orally bioavailable drugs that work by binding to RNA targets implicated in disease processes. The program is enabled by a technology platform that integrates functional genomics, informatics and an RNA-focused chemistry program coupled with novel, high throughput mass spectrometry-based screening methods. Ibis currently focuses on antibacterials, antivirals and cancer as areas of therapeutic emphasis. The division has expanded its program this year to include a diagnostic application of its technology to detect infectious agents used in biological warfare attacks. In 2001, the Ibis Therapeutics division enjoyed a productive collaboration with Agouron Pharmaceuticals, Inc., in which Ibis achieved two milestones totaling \$4 million. This collaboration is scheduled to end in June 2002.

The U.S. Army Medical Research Acquisition Activity, 820 Chandler Street, Fort Detrick, MD 21702-5014 is the awarding and administering acquisition office of award number DAMD17-02-2-0023. The content of the information in this release does not necessarily reflect the position or the policy of the Government, and no official endorsement should be inferred.

Isis Pharmaceuticals, Inc. is exploiting its expertise in RNA to discover and develop novel human therapeutic drugs. The Company has commercialized its first product, Vitravene® (fomivirsen), to treat CMV-induced retinitis in AIDS patients. In addition, Isis has 13 antisense products in its development pipeline, with two in late-stage development and six in Phase II human clinical trials. LY900003 (ISIS 3521), an inhibitor of PKC-alpha, is in Phase III trials for non-small cell lung cancer, and alicaforsen (ISIS 2302), an ICAM-1 inhibitor, is in Phase III human clinical trials for Crohn's disease. Isis has a broad patent estate, as the owner or exclusive licensee of nearly 900 issued patents worldwide. Isis' GeneTrove™ division uses antisense to assist pharmaceutical industry partners in validating and prioritizing potential gene targets through customized services. Ibis Therapeutics™ is a division focused on the discovery of small molecule drugs that bind to RNA. Additional information about Isis is available at [www.isispharm.com](http://www.isispharm.com)

This press release contains forward-looking statements concerning Ibis Therapeutics, a division of Isis Pharmaceuticals, and its prospects, planned development activities and therapeutic potential for our pipeline 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 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 in the Company's Annual Report on Form 10K, for the period ended December 31, 2001, which is on file with the U.S. Securities and Exchange Commission, copies of which are available from the company.

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