Issuance of Key Second-Generation Antisense Patent Further Strengthens Isis' Intellectual Property Estate

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CARLSBAD, Calif., April 3 /PRNewswire-FirstCall/ -- Isis Pharmaceuticals, Inc. (Nasdaq: ISIS) announced today that the issuance of U.S. Patent 6,346,614 to the University of Massachusetts by the United States Patent and Trademark Office has strengthened Isis' position in antisense technology. The issued patent covers antisense drugs that use a broad range of second-generation antisense chemistries. Isis uses second-generation chemistries to create antisense drugs that are safer and more effective. As a licensee of this patent, Isis' opportunity to create highly specific antisense drugs for a broad range of diseases is further protected and enhanced.

In May of 2001, Isis acquired a license to this patent, and others, from Hybridon which included exclusive rights to sublicense these patents to third parties. Hybridon retained a limited right to sublicense these patents within a certain type of drug discovery collaboration.

"The issuance of this patent further enhances Isis' position within the industry as the most comprehensive provider of access to antisense technology," said B. Lynne Parshall, Isis Executive Vice President and CFO. "Control of this patent further supports the commercialization of second- generation antisense drugs, which is increasingly valued by the pharmaceutical industry. Our strategy is to facilitate the development of more antisense drugs than we can afford to develop on our own. Our intellectual property estate is a key asset in the implementation of this strategy."

Isis controls a broad intellectual property estate of nearly 900 issued patents that covers RNA-based drug discovery and development. The patent portfolio covers the use of antisense inhibitors as drugs, including chemistries, antisense inhibitor designs called "motifs," methods of use of antisense inhibitors, and mechanisms of action by which antisense inhibitors inactivate an RNA target. Isis' patent estate also covers the use of antisense inhibitors as tools for gene functionalization and target validation.

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 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 .

This press release contains forward-looking statements concerning Isis Pharmaceuticals and the potential of the company's intellectual property position. 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, the reader is 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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