Isis Pharmaceuticals To Receive \$1.1 Million From Alnylam

October 23, 2012

CARLSBAD, Calif., Oct. 23, 2012 /PRNewswire/ -- Isis Pharmaceuticals, Inc. (NASDAQ: ISIS) announced today that it will receive \$1.1 million from Alnylam Pharmaceuticals, Inc. (NASDAQ: ALNY) as its portion of the upfront fees in Alnylam's recently announced collaboration with Genzyme. In addition, Isis has the potential to receive royalty payments and a portion of future milestone payments. Already this year, Isis has earned \$2.7 million from Alnylam as a result of Alnylam's licenses that were supported by Isis' patents, further emphasizing the value of Isis' innovation and the leadership role Isis has played in the field of RNA-based technology.

"We have a broad and valuable patent estate built upon our innovations and discoveries related to RNA-based technologies that provides us with extensive protection for our drugs and our technologies. Our business strategy maximizes the value of these innovations by granting partners access to our technology for uses that are outside our key areas of focus. Using this strategy, we have been able to generate more than \$400 million from the sale and licensing of our intellectual property," said B. Lynne Parshall, chief operating officer and chief financial officer at Isis.

Isis is the leading company in RNA-based technology and owns or controls more than 1,500 issued patents. As such, Isis holds patents for numerous applications of antisense technology, including RNAi, and for novel targets, such as microRNAs being developed by Regulus, which was co-founded by Isis and Alnylam. In 2004, Isis and Alnylam entered into a strategic relationship in which Alnylam obtained an exclusive license to Isis' intellectual property for double-stranded oligonucleotide therapeutics that mediate RNAi. In return, Isis received an upfront payment and financial participation in future transactions supported by Isis' patents.

ABOUT ISIS PHARMACEUTICALS, INC.

Isis is exploiting its leadership position in antisense technology to discover and develop novel drugs for its product pipeline and for its partners. Isis' broad pipeline consists of 25 drugs to treat a wide variety of diseases with an emphasis on cardiovascular, metabolic, severe and rare diseases, and cancer. Isis' partner, Genzyme, plans to commercialize Isis' lead product, KYNAMRO™, following regulatory approval. Isis' patents provide strong and extensive protection for its drugs and technology. Additional information about Isis is available at www.isispharm.com.

ISIS PHARMACEUTICALS' FORWARD-LOOKING STATEMENT

This press release includes forward-looking statements regarding Isis Pharmaceuticals' business, its intellectual property estate, and the therapeutic and commercial potential of Isis' products and technologies. Any statement describing Isis' goals, expectations, financial or other projections, intentions or beliefs, including the planned commercialization of KYNAMRO, 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 in the endeavor of building a business around such drugs. Isis' forward-looking statements also involve assumptions that, if they never materialize or prove correct, could cause its results to differ materially from those expressed or implied by such forward-looking statements. Although Isis' forward-looking statements reflect the good faith judgment of its management, these statements are based only on facts and factors currently known by Isis. As a result, you are cautioned not to rely on these forward-looking statements. These and other risks concerning Isis' programs are described in additional detail in Isis' annual report on Form 10-K for the year ended December 31, 2011 and its most recent quarterly report on Form 10-Q, which are on file with the SEC. Copies of these and other documents are available from the Company.

In this press release, unless the context requires otherwise, "Isis," "Company," "we," "our," and "us" refers to Isis Pharmaceuticals.

Isis Pharmaceuticals® is a registered trademark of Isis Pharmaceuticals, Inc. KYNAMRO™ is a trademark of Genzyme Corporation.

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D. Wade Walke, Ph.D., Executive Director, Corporate Communications and Investor Relations, +1-760-603-2741, or Amy Blackley, Ph.D., Associate Director, Corporate Communications, +1-760-603-2772