Xenon Licenses Antisense Drug XEN701 From Isis and Initiates Preclinical Toxicology Studies

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CARLSBAD, Calif. and VANCOUVER, British Columbia, June 10, 2013 /PRNewswire/ -- Isis Pharmaceuticals, Inc. (NASDAQ: ISIS) and Xenon Pharmaceuticals Inc. announced today that Xenon has exercised its option to an exclusive worldwide license to XEN701, an antisense drug discovered in a collaboration between Isis and Xenon. For the license of XEN701, Isis earns a $2 million payment from Xenon. XEN701 is a drug candidate designed to inhibit the production of hepcidin, a target Xenon identified utilizing its extreme genetics platform for the treatment of anemia of chronic disorders (ACD). XEN701 is currently being evaluated in studies to support clinical development. Xenon plans to initially develop XEN701 for patients with chronic kidney disease who are intolerant of or who are poor responders to erythropoietin (Epo) therapy. XEN701 is the first drug to enter development from Isis' collaboration with Xenon.

"We are delighted with the advances we have made with Isis to discover XEN701," said Simon Pimstone, Xenon's President and CEO. "XEN701 has the potential to provide significant therapeutic benefit to patients with ACD through a novel non-Epo receptor based mechanism and we are looking forward to initiating clinic studies with this compound."

"We are pleased with the success of our collaboration with Xenon and the opportunity to apply our antisense drug discovery technology to discover XEN701, a novel antisense drug to treat ACD," said B. Lynne Parshall, chief operating officer at Isis. "A key component of our business strategy is to exploit the broad applicability of our antisense technology platform in order to develop antisense drugs in many different therapeutic areas. By working with partners like Xenon, who are highly innovative and dedicated to a therapeutic area, we are able to expand the breadth of our antisense drug pipeline while staying focused on our internal drug discovery and development activities."

In 2010, Isis entered into collaboration with Xenon to discover and develop antisense drugs as novel treatments for ACD. Under the terms of the agreement, Isis received an undisclosed upfront payment in the form of a convertible promissory note from Xenon to discover and develop antisense drugs to the targets hepcidin and hemojuvelin. Upon the identification of a development candidate, Xenon has the option to exclusively license the development and worldwide commercialization rights for these antisense drugs from Isis. Xenon paid Isis a $2 million fee to exercise its option to license XEN701. Xenon is responsible for all future development and commercialization of XEN701 and Isis is eligible to receive development and commercial milestone payments and royalties from Xenon on sales of XEN701, as well as a portion of sublicense revenue.

About ACD
ACD is the second most common form of anemia worldwide and commonly acquired disorder that is associated with a variety of conditions including kidney disease, malignancy and other clinical settings of chronic inflammation such as inflammatory bowel disease. Utilizing its genetics platform, Xenon's discovery of the genes underlying the rare genetic disorder juvenile hemochromatosis (JH) led to its selection of hepcidin, a protein produced in the liver, as a drug target to treat patients with ACD. JH, where hepcidin is genetically deficient, is a disorder of iron metabolism where white blood cells are iron-depleted and intestinal iron absorption is enhanced, resulting in total body iron overload. ACD, on the other hand, is characterized by iron-rich white blood cells and impaired intestinal iron absorption due to elevated hepcidin, which can result in restricted iron availability for red blood cell production and anemia. Inhibition of hepcidin with XEN701 is predicted to improve the anemia by reversing these iron disturbances facilitating new red blood cell production.

ABOUT XENON PHARMACEUTICALS INC.
Xenon is a privately owned, clinical genetics-based drug discovery and development company engaged in developing novel therapies for rare diseases. For more information, visit the Company's website at www.xenon-pharma.com.

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 28 drugs to treat a wide variety of diseases with an emphasis on cardiovascular, metabolic, severe and rare diseases, and cancer. Isis' partner, Genzyme, is commercializing Isis' lead product, KYNAMRO™, inthe United States for the treatment of patients with HoFH. Genzyme is also pursuing marketing approval of KYNAMRO in other markets. 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' strategic alliance with Xenon, and the discovery, development, activity, therapeutic and commercial potential and safety of Isis' antisense drugs, including XEN701, for the treatment of anemia of chronic disorders. Any statement describing Isis' goals, expectations, financial or other projections, intentions or beliefs, including the commercial potential 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, 2012 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.

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

XENON PHARMACEUTICALS' FORWARD-LOOKING STATEMENT
This release contains forward-looking statements that are not based on historical fact. These forward-looking statements involve risks, uncertainties and other factors that may cause the actual results, events or developments to be materially different from those expressed or implied by such forward-looking statements. Readers are cautioned not to place undue reliance on such forward-looking statements.

SOURCE Isis Pharmaceuticals, Inc.

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