# Isis Pharmaceuticals Licenses ISIS-FXI Rx to Bayer to Develop and Commercialize for the Prevention of Thrombosis

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# --Bayer to develop ISIS-FXI Rx broadly for the prevention of thrombosis----Transaction maximizes value of the ISIS-FXI Rx program----Partnership provides Isis with significant potential to participate in commercial success of ISIS-FXI Rx--

CARLSBAD, Calif., May 4, 2015 /PRNewswire/ -- Isis Pharmaceuticals, Inc. (NASDAQ: ISIS) has entered into an exclusive license agreement with Bayer HealthCare (Bayer) to develop and commercialize ISIS-FXI<sub>Rx</sub> for the prevention of thrombosis. Under the terms of the agreement, Isis is eligible to receive up to \$155 million in near-term payments, including an immediate \$100 million up-front payment and a \$55 million payment upon advancement of the program following a Phase 2 study in patients with compromised kidney function. Isis is also eligible to receive milestone payments as the drug advances toward the market. In addition, Isis is eligible to receive tiered royalties in the low to high twenty percent range on gross margins of ISIS-FXI<sub>Rx</sub>. After completion of ongoing activities at Isis, Bayer will assume all global clinical development as well as worldwide regulatory and commercialization responsibilities for ISIS-FXI<sub>Rx</sub>.



As part of the clinical development program, Bayer plans to evaluate the therapeutic profile of ISIS-FXI<sub>Rx</sub> in patients for whom currently available anticoagulants may not be used, such as in patients with a high risk of bleeding due to multiple co-morbidities.

"We believe Bayer, a leading pharmaceutical company in the treatment of thrombotic disease, is the ideal partner for ISIS-FXI<sub>Rx</sub>. This transaction further demonstrates Bayer's commitment to the field. Bayer has the expertise, commitment and resources to develop ISIS-FXI<sub>Rx</sub> in areas where unmet medical needs exist. We are pleased with the value of this partnership, which supports a robust development program to maximize the value of ISIS-FXI<sub>Rx</sub> globally and which allows us to participate significantly in future commercial success," said Stanley Crooke, Ph.D, M.D., chief executive officer at Isis Pharmaceuticals. "We believe that this transaction represents the right deal, with the right partner and the right development plan."

"This first-in-class FXI inhibitor perfectly complements our in-house thrombosis pipeline and is an innovative development candidate for a variety of anti-coagulation needs," said Dr. Joerg Moeller, Member of the Bayer HealthCare Executive Committee and Head of Global Development. "We believe the novel mechanism of Factor XI inhibition may offer an additional pathway for treating patients for whom there are currently no suitable therapeutic options available. We share a common vision with Isis in developing ISIS-FXI<sub>Rx</sub> to its full potential."

This transaction is subject to clearances under the Hart-Scott Rodino Antitrust Improvements Act.

# ABOUT ISIS-FXIRx

ISIS-FXI<sub>Rx</sub> is an antisense drug in development for the prevention of clotting disorders. It targets Factor XI, a clotting factor produced in the liver that is an important component of the coagulation pathway. High levels of Factor XI increase the risk of thrombosis, a process involving aberrant blood clot formation that can be responsible for heart attacks and strokes, while Factor XI deficiency results in a lower incidence of thromboembolic events with minimal increase in bleeding risk. In a Phase 2 comparator-controlled study evaluating the incidence of venous thromboembolic events, or VTEs, in patients treated with ISIS-FXI<sub>Rx</sub> undergoing total knee replacement surgery, patients treated with 300 mg of ISIS-FXI<sub>Rx</sub> experienced a seven-fold lower rate of VTE as compared with those treated with enoxaparin (4.2% and 30.4%, respectively; p<0.001). In this study, ISIS-FXI<sub>Rx</sub> was generally well tolerated with no observed differences in safety outcomes compared with enoxaparin. The data from this study was published in the New England Journal of Medicine in December 2014.

### ABOUT BAYER HEALTHCARE

The Bayer Group is a global enterprise with core competencies in the fields of health care, agriculture and high-tech materials. Bayer HealthCare, a subgroup of Bayer AG with annual sales of around EUR 20.0 billion (2014), is one of the world's leading, innovative companies in the healthcare and medical products industry and is based in Leverkusen, Germany. The company combines the global activities of the Animal Health, Consumer Care, Medical Care and Pharmaceuticals divisions. Bayer HealthCare's aim is to discover, develop, manufacture and market products that will improve human and animal health worldwide. Bayer HealthCare has a global workforce of 60,700 employees (Dec 31, 2014) and is represented in more than 100 countries. More information is available at <a href="https://www.healthcare.bayer.com">www.healthcare.bayer.com</a>.

## ABOUT ISIS PHARMACEUTICALS, INC.

Isis is exploiting its leadership position in RNA-targeted technology to discover and develop novel drugs for its product pipeline and for its partners. Isis' broad pipeline consists of 38 drugs to treat a wide variety of diseases with an emphasis on cardiovascular, metabolic, severe and rare diseases, including neurological disorders, and cancer. Isis' partner, Genzyme, is commercializing Isis' lead product, KYNAMRO<sup>®</sup>, in the United States and other countries for the treatment of patients with homozygous FH. Isis has numerous drugs in Phase 3 development in severe/rare diseases and cardiovascular diseases. These include ISIS-APOCIII<sub>Rx</sub>, a drug Isis is developing and plans to commercialize through its wholly owned subsidiary, Akcea Therapeutics, to treat patients with familial chylomicronemia syndrome and partial lipodystrophy; ISIS-TTR<sub>Rx</sub>, a drug Isis is developing with GSK to treat patients with the polyneuropathy and cardiomyopathy forms of TTR amyloidosis; and ISIS-SMN<sub>Rx</sub>, a drug Isis is developing with Biogen to treat infants and children with spinal muscular atrophy, a severe and rare neuromuscular disease. Isis' patents provide strong and extensive protection for its drugs and technology. Additional information about Isis is available at <u>www.isispharm.com</u>.

#### ISIS PHARMACEUTICALS' FORWARD-LOOKING STATEMENT

This press release includes forward-looking statements regarding Isis' alliance with Bayer, the development, activity, therapeutic potential, commercial potential and safety of ISIS-FXI<sub>Rx</sub>. Any statement describing Isis' goals, expectations, financial or other projections, intentions or beliefs 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, 2014, which is on file with the SEC. Copies of this 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 and its subsidiaries.

Isis Pharmaceuticals<sup>®</sup> is a registered trademark of Isis Pharmaceuticals, Inc. Akcea Therapeutics<sup>™</sup> is a trademark of sis Pharmaceuticals, Inc. KYNAMRO<sup>®</sup> is a registered trademark of Genzyme Corporation.

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#### SOURCE Isis Pharmaceuticals, Inc.

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