

Biogen Idec and Isis Pharmaceuticals Announce Collaboration For Antisense Programs To Treat Neurological Disorders

December 10, 2012

--Biogen Idec has Option to Develop and Commercialize Promising Compounds from Three Research Programs to Treat Neurological or Neuromuscular Disorders--

--Isis Expands its Severe and Rare/Neuro Franchise with Three Promising New Targets--

WESTON, Mass. and CARLSBAD, Calif., Dec. 10, 2012 /PRNewswire/ -- Biogen Idec (NASDAQ: BIIB) and Isis Pharmaceuticals, Inc. (NASDAQ: ISIS) today announced that they have entered into a global collaboration agreement under which the companies will discover and develop antisense drugs against three undisclosed targets to treat neurological or neuromuscular disorders. Biogen Idec and Isis are also developing antisense drugs to treat spinal muscular atrophy and myotonic dystrophy type 1 under previously established collaborations.

"Our latest collaboration with Isis to discover and develop novel targets for the treatment of neurological disorders is a perfect fit within our early-stage research strategy," said Richard Brudnick, vice president and co-head of business development at Biogen Idec. "This will be our third collaboration with Isis, which is reflective of our respect for them as a partner and as a leader in antisense technology. By combining Isis' knowledge with Biogen Idec's expertise as a leader in neurology, we believe this latest discovery collaboration holds great potential for finding novel approaches to treating neurologic diseases."

Under the terms of the agreement, Isis will receive an upfront payment of \$30 million and is responsible for the discovery of a lead antisense drug for each of the three undisclosed targets. Isis is eligible to receive substantial development milestone payments to support research and development of each program prior to the exercise by Biogen Idec of its option to license each program. Biogen Idec has the option to license a drug from each of the three programs through the completion of Phase 2 trials. Isis could receive up to another \$200 million in a license fee and regulatory milestone payments per program. In addition, Isis will receive double-digit royalties on sales of drugs. Isis will be responsible for development of the drugs through the completion of the initial Phase 2 clinical trial, with Biogen Idec providing advice and assistance on research and the clinical trial design and conduct and regulatory strategy for each program. If Biogen Idec exercises its option, it will assume global development, regulatory and commercialization responsibilities.

"We look forward to broadening our drug discovery and development efforts to include new neurological disease targets with Biogen Idec, a world leader in neurological diseases. Combining our antisense drug discovery with Biogen Idec's expertise in severe neurological diseases has significantly enhanced the development of our spinal muscular atrophy and myotonic dystrophy programs. For example, Biogen Idec's contributions have added significant value across multiple areas, such as government affairs, biomarker development, clinical trial design and regulatory expertise, bolstering our development activities for these programs," said B. Lynne Parshall, chief operating officer and chief financial officer at Isis. "We have been very successful in our partnering efforts this year, driven primarily by the advancement of the drugs in our pipeline. The high level of interest in our drug discovery technologies allows us to select the optimal partner for each program, while commanding significant value for our assets."

This collaboration follows two worldwide option and collaboration agreements between Biogen Idec and Isis, which were announced earlier in 2012, to develop and commercialize antisense drugs for the treatment of spinal muscular atrophy and myotonic dystrophy type 1.

About Biogen Idec

Through cutting-edge science and medicine, Biogen Idec discovers, develops and delivers to patients worldwide innovative therapies for the treatment of neurodegenerative diseases, hemophilia and autoimmune disorders. Founded in 1978, Biogen Idec is the world's oldest independent biotechnology company. Patients worldwide benefit from its leading multiple sclerosis therapies, and the company generates more than \$5 billion in annual revenues. For product labeling, press releases and additional information about the company, please visit www.biogenidec.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 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™, in the United States and Europe following regulatory approval. Isis' patents provide strong and extensive protection for its drugs and technology. Additional information about Isis is available at <http://www.isispharm.com/>.

Biogen Idec Safe Harbor Statement

This press release contains forward-looking statements, including statements about product development and commercialization. These forward-looking statements may be accompanied by such words as "anticipate," "believe," "estimate," "expect," "forecast," "intend," "may," "plan," "will" and other words and terms of similar meaning. You should not place undue reliance on these statements. Drug development and commercialization involve a high degree of risk. Factors which could cause actual results to differ materially from current expectations include the risk that adverse safety events may occur, regulatory authorities may require additional information or may fail to approve any potential new therapy, product reimbursement may be limited or unavailable, there may be problems with manufacturing processes, intellectual property rights may not be adequately protected, and the other risks and uncertainties that are described in the Risk Factors section of Biogen Idec Inc.'s most recent annual or quarterly report and in other reports Biogen Idec Inc. has filed with the SEC. These statements are based on current beliefs and expectations and speak only as of the date of this press release. Biogen Idec Inc. does not undertake any obligation to publicly update any forward-looking statements.

Isis Pharmaceuticals' Forward-Looking Statement

This press release includes forward-looking statements regarding Isis' strategic alliance with Biogen Idec, and Isis' research and development opportunities in disease areas including neurological and neuromuscular diseases. 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.

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

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