Isis Pharmaceuticals Initiates Phase 2 Study of ISIS-CRP Rx in Patients With Atrial Fibrillation

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CARLSBAD, Calif., Feb. 26, 2013 /PRNewswire/ -- Isis Pharmaceuticals, Inc. (NASDAQ: ISIS) announced the initiation of a Phase 2 study evaluating ISIS-CRP$_{Rx}$ in patients with paroxysmal atrial fibrillation. Atrial fibrillation (AF) involves an irregular and often rapid heart rate that commonly causes poor blood flow to the body. Paroxysmal AF is a type of AF characterized by unpredictable episodes of AF that can occur as frequently as every day. Patients with AF can experience chest palpitations, chest pain, weakness and decreased blood pressure during an event. While the cause of paroxysmal AF is not known, elevated levels of CRP are associated with an increase in the severity of AF episodes. ISIS-CRP$_{Rx}$ is being evaluated in patients with AF to measure the effect of lowering CRP on the frequency and duration of the episodes.

"CRP is elevated in many inflammatory disorders and can also be elevated in diseases with inflammatory components, like AF. Elevation of CRP in these diseases is usually associated with increased disease burden and worse disease outcome. In this study, we will evaluate the effect of selectively lowering CRP on the severity of AF in patients who are prone to frequent and unpredictable AF events. By selectively lowering CRP with ISIS-CRP$_{Rx}$, we hope to observe a decrease in the frequency and duration of AF events in these patients," said Richard Geary, Ph.D., senior vice president of development at Isis. "ISIS-CRP$_{Rx}$ is the first drug to be evaluated in clinical studies that can selectively reduce CRP. In our Phase 1 studies, we observed selective, dose-dependent reduction of CRP in healthy volunteers. Our Phase 2 program is designed to provide us with proof-of-concept data in diseases where elevated levels of CRP are predictive of severity of disease."

The Phase 2 study is a randomized, placebo-controlled, multiple-dose study evaluating the safety and efficacy of ISIS-CRP$_{Rx}$ as a single agent in approximately 20 patients with AF who have pacemakers. The study is designed to evaluate the effects of ISIS-CRP$_{Rx}$ on the frequency and duration of AF episodes. In addition to studying ISIS-CRP$_{Rx}$ in AF, Isis is also currently evaluating ISIS-CRP$_{Rx}$ in a Phase 2 study in patients with rheumatoid arthritis (RA), where CRP is chronically elevated. Top-line data from the Phase 2 RA study is planned for the middle of this year.

"ISIS-CRP$_{Rx}$ is the first drug to test the hypothesis that lowering CRP levels could produce therapeutic benefit to patients. Although we are currently only evaluating ISIS-CRP$_{Rx}$ in patients with rheumatoid arthritis and AF, if we are successful in demonstrating a significant benefit to lowering CRP in one or both of these diseases, there is a significant potential for ISIS-CRP$_{Rx}$ to have broad application in numerous diseases with large commercial opportunity," concluded Lynne Parshall, chief operating officer at Isis.

ABOUT ISIS-CRP$_{Rx}$

ISIS-CRP$_{Rx}$ is an antisense drug that is designed to inhibit the production of C-reactive protein (CRP). For many years, CRP has been used as a clinical biomarker of diseases with an inflammatory component, such as cardiovascular disease, Crohn's disease, RA and end-stage renal disease. Elevated levels of CRP have been linked to coronary artery disease and a growing body of evidence from clinical trials implicated CRP in cardiovascular disease progression. Although CRP's active participation in these diseases remains to be determined, several lines of evidence support a causal role of CRP in disease, suggesting that it may be therapeutically beneficial to decrease CRP levels.

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, including Europe. 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 the development, activity, therapeutic potential and safety of ISIS-CRP$_{Rx}$. 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, 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 and its subsidiaries.

SOURCE Isis Pharmaceuticals, Inc.

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