

FDA Advisory Committee Recommends KYNAMRO™ for Homozygous Familial Hypercholesterolemia

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-- KYNAMRO™ may provide a novel, new treatment for patients in the U.S. who are at severe cardiovascular risk --

CAMBRIDGE, Mass. and CARLSBAD, Calif.--(BUSINESS WIRE)-- [Genzyme](#), a Sanofi company (EURONEXT: SAN and NYSE: SNY), and Isis Pharmaceuticals Inc. ([ISIS](#)), announced today that the Endocrinologic and Metabolic Drugs Advisory Committee of the U.S. Food and Drug Administration (FDA) voted **9 to 6** that Genzyme had provided sufficient efficacy and safety data to support the marketing of KYNAMRO™ (mipomersen sodium) for the treatment of patients with Homozygous Familial Hypercholesterolemia (HoFH). Many people with HoFH have aggressive cardiovascular disease beginning in childhood, and even with today's therapies remain at significant risk of cardiovascular events.

"We are very encouraged by the support for KYNAMRO at today's Advisory Committee meeting, which marks a significant and positive step in our efforts to bring this important new therapy to patients and families affected by this often unrecognized genetic disorder," said David Meeker, President and CEO, Genzyme. "There is still a great need for the HoFH patients, who have exhausted conventional medications and still have LDL cholesterol levels 2-4 times above normal. Genzyme looks forward to working with the FDA as it completes its review of the KYNAMRO application."

The Committee's input will be considered by the FDA in its review of the New Drug Application for KYNAMRO. The FDA is not bound by the Committee's guidance, but takes its advice into consideration when reviewing investigational medicines. Genzyme submitted the NDA on March 29, 2012, and the FDA has set a target action date under the Prescription Drug User Fee Act (PDUFA) of January 29, 2013. An application for marketing approval of KYNAMRO™ is also pending in the European Union.

In considering the benefits and risks associated with KYNAMRO, the Committee reviewed data from one pivotal Phase 3 double-blind, placebo controlled study in HoFH patients, three supportive Phase 3 studies in other high-risk hypercholesterolemia populations and an ongoing long term extension study.

"KYNAMRO could represent a significant advance for patients with HoFH, who are unable to adequately control their LDL-C and remain at significant risk of a cardiac event. We are pleased with the positive recommendation from the advisory committee and look forward to the FDA's decision early next year," said B. Lynne Parshall, Chief Operating Officer and CFO of Isis. "KYNAMRO is an example of our leadership in the field of RNA-targeted therapies and provides compelling evidence of the power of our drug discovery technology to create potent and specific drugs that could play an important role in the treatment of disease."

KYNAMRO™ is the registered trade name submitted to health authorities for the investigational agent mipomersen sodium.

About KYNAMRO (mipomersen sodium)

KYNAMRO is a first-in-class apo-B synthesis inhibitor currently under regulatory review for patients with homozygous familial hypercholesterolemia (HoFH) to further reduce LDL cholesterol (LDL-C) in patients already maintaining a stable regimen of maximally tolerated lipid lowering therapies, and who require additional, significant lipid lowering therapy. It is intended to reduce LDL-C by preventing the formation of atherogenic lipoproteins, the particles that carry cholesterol through the bloodstream. KYNAMRO acts by blocking the production of, apolipoprotein B (apo B), the protein that provides the structural core for these atherogenic particles, including LDL and lipoprotein-a (Lp(a)).

About Familial Hypercholesterolemia (FH)

FH is a genetic disease that results in elevated LDL-C levels and family patterns of increased risk of premature heart disease and heart disease-related death. FH patients have inherited abnormalities in liver cells that are responsible for clearing LDL particles from the blood. FH is autosomal dominant, which means that all first-degree relatives of FH patients have a 50 percent chance of having the disease as well, making early detection through family screening critically important.

The most severe FH patients have LDL-C levels that are two to four times higher than recommended levels, even when taking multiple cholesterol-lowering medications. These people, who are characterized as having severe FH, include: those who have inherited the disease from both parents (HoFH) and those who have inherited it from only one parent, and have a particularly severe form of the disease (Severe HeFH) defined as those people who are maximally treated and still have LDL-C greater than 200 mg/dL (5.1 mmol) with coronary heart disease or greater than 300 mg/dL (7.1 mmol) without coronary heart disease. People with HoFH may have aggressive heart disease beginning in childhood, and even with today's therapies remain at significant risk of cardiovascular events. Learn more at www.FHJourneys.com.

About Genzyme, a Sanofi Company

Genzyme has pioneered the development and delivery of transformative therapies for patients affected by rare and debilitating diseases for over 30 years. We accomplish our goals through world-class research and with the compassion and commitment of our employees. With a focus on rare diseases and multiple sclerosis, we are dedicated to making a positive impact on the lives of the patients and families we serve. That goal guides and inspires us every day. Genzyme's portfolio of transformative therapies, which are marketed in countries around the world, represents groundbreaking and life-saving advances in medicine. As a Sanofi company, Genzyme benefits from the reach and resources of one of the world's largest pharmaceutical companies, with a shared commitment to improving the lives of patients. Learn more at www.genzyme.com.

About Sanofi

Sanofi, a global and diversified healthcare leader, discovers, develops and distributes therapeutic solutions focused on patients' needs. Sanofi has core strengths in the field of healthcare with seven growth platforms: diabetes solutions, human vaccines, innovative drugs, consumer healthcare, emerging markets, animal health and the new Genzyme. Sanofi is listed in Paris ([SAN](#)) and in New York ([SNY](#)).

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 and severe and rare/neurodegenerative 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.

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Sanofi Forward Looking Statements

This press release contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements are statements that are not historical facts. These statements include projections and estimates and their underlying assumptions, statements regarding plans, objectives, intentions and expectations with respect to future financial results, events, operations, services, product development and potential, and statements regarding future performance. Forward-looking statements are generally identified by the words "expects", "anticipates", "believes", "intends", "estimates", "plans" and similar expressions. Although Sanofi's management believes that the expectations reflected in such forward-looking statements are reasonable, investors are cautioned that forward-looking information and statements are subject to various risks and uncertainties, many of which are difficult to predict and generally beyond the control of Sanofi, that could cause actual results and developments to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include among other things, the uncertainties inherent in research and development, future clinical data and analysis, including post marketing, decisions by regulatory authorities, such as the FDA or the EMA, regarding whether and when to approve any drug, device or biological application that may be filed for any such product candidates as well as their decisions regarding labelling and other matters that could affect the availability or commercial potential of such product candidates, the absence of guarantee that the product candidates if approved will be commercially successful, the future approval and commercial success of therapeutic alternatives, the Group's ability to benefit from external growth opportunities, trends in exchange rates and prevailing interest rates, the impact of cost containment policies and subsequent changes thereto, the average number of shares outstanding as well as those discussed or identified in the public filings with the SEC and the AMF made by Sanofi, including those listed under "Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements" in Sanofi's annual report on Form 20-F for the year ended December 31, 2011. Other than as required by applicable law, Sanofi does not undertake any obligation to update or revise any forward-looking information or statements.

Isis Forward Looking Statement

This press release includes forward-looking statements regarding Isis' collaboration with Genzyme, a Sanofi company, and the development, activity, therapeutic benefit and safety of KYNAMRO™ in treating patients with high cholesterol. 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.

Contact:

Genzyme Media Relations

Ingrid Esser, +1-617-768-6699

Ingrid.esser@genzyme.com

or

Isis Contacts:

(Investors)

D. Wade Walke, Ph.D., 760-603-2741

or

(Media)

Amy Blackley, Ph.D., 760-603-2772