Akcea and Ionis Announce Acceptance of Marketing Applications in U.S., EU and Canada for Volanesorsen for the Treatment of FCS

November 15, 2017

FDA Prescription Drug User Fee Act goal date set for August 30, 2018

CAMBRIDGE, Mass., Nov. 15, 2017 (GLOBE NEWSWIRE) -- Akcea Therapeutics, Inc. (NASDAQ:AKCA), an affiliate of Ionis Pharmaceuticals, Inc. (NASDAQ:IONS), focused on developing and commercializing drugs to treat patients with serious cardiometabolic diseases caused by lipid disorders, today announced that all of its marketing applications for volanesorsen have been accepted for review in the U.S., EU and Canada for the treatment of patients with familial chylomicronemia syndrome (FCS).

If approved, volanesorsen would be the first therapy indicated for people with FCS. The U.S. and EU regulatory agencies have granted Orphan Drug Designation to volanesorsen for this indication.

FCS is a severe, rare disorder characterized by extremely high levels of triglycerides, symptoms such as extreme abdominal pain that affect daily living, and the risk of recurrent, potentially fatal, acute pancreatitis. FCS impacts people across the globe.

"We are committed to seeking global approvals for volanesorsen at the outset. We are driven by the stories of people with FCS worldwide who persevere daily with a debilitating condition without an effective therapy. The acceptances of our regulatory filings in the U.S., EU and Canada are important steps forward in the global regulatory review process for volanesorsen, which brings us closer to potentially providing the first approved therapy for the treatment of people with FCS," said Paula Soteropoulos, chief executive officer of Akcea Therapeutics. "The entire Akcea team is dedicated to working closely with each regulatory agency to support the review of volanesorsen."

In the U.S., the Food and Drug Administration (FDA) assigned a Prescription Drug User Fee Act (PDUFA) goal date of August 30, 2018. The New Drug Submission (NDS) has passed screening by Health Canada and was granted Priority Review. The EMA has validated the volanesorsen Marketing Authorization Application (MAA). Volanesorsen has been granted a Promising Innovative Medicine (PIM) Designation by the United Kingdom's Medicines and Healthcare products Regulatory Agency (MHRA) for the treatment of people with FCS.

ABOUT THE VOLANESORSEN CLINICAL PROGRAM IN FCS

The applications for volanesorsen for the treatment of people with FCS are based on data from the Phase 3 APPROACH and COMPASS studies. The pivotal APPROACH study was the largest study ever conducted in patients with FCS. APPROACH, a one-year, randomized, placebo-controlled study in 66 patients with FCS (average baseline triglycerides of 2,209 mg/dL, or 25.0 mmol/L), achieved its primary endpoint of reduction in triglycerides at three months, with a 77% mean reduction in triglycerides, which translated into a 1,712 mg/dL (19.3 mmol/L) mean absolute triglyceride reduction in volanesorsen-treated patients. The treatment difference seen in the study was 77% compared to an 18% increase for placebo.

In addition, in the APPROACH study, treatment with volanesorsen was associated with a statistically significant reduced rate of on-study pancreatitis attacks in the group of patients who had multiple pancreatitis events during the 5 years prior to screening and reduced abdominal pain in patients reporting pain during the screening period.

COMPASS is a study which supports volanesorsen's regulatory filings in FCS. COMPASS, a six-month randomized placebo-controlled study in 113 patients with very high triglycerides (>500 mg/dL), also achieved its primary endpoint of reduction in triglycerides at three months, with a 71% mean reduction in triglycerides. In the COMPASS study, treatment with volanesorsen was associated with a statistically significant reduction in on-study pancreatitis attacks.

The most common adverse event in the studies was injection site reactions, which were mostly mild. Platelet count reductions were observed in many patients. These platelet declines were not clinically significant in most patients and were generally well managed with monitoring and dose adjustment. Five patients discontinued participation in the APPROACH study due to platelet count reductions, two of which were severe; four patients discontinued due to other nonserious adverse events.

Akcea is currently enrolling patients with FCS in the APPROACH Open Label Extension study. For more information, please visit www.clinicaltrials.gov.

ABOUT VOLANESORSEN, FCS AND FPL

Volanesorsen, a product of Ionis' proprietary antisense technology, is in development for two rare metabolic disorders: FCS and FPL. Volanesorsen is designed to reduce the production of ApoC-III, a protein produced in the liver that plays a central role in the regulation of plasma triglycerides and may also affect other metabolic parameters. Volanesorsen is under regulatory review in the U.S., EU and Canada. The U.S. and EU regulatory agencies have granted Orphan Drug Designation to volanesorsen for the treatment of patients with FCS.

FCS is a severe, rare disorder characterized by extremely high levels of triglycerides, daily symptoms such as abdominal pain, and the risk of recurrent, potentially fatal, acute pancreatitis. People with FCS are unable to effectively metabolize large, triglyceride-rich lipid particles called chylomicrons due to a deficiency in lipoprotein lipase, an enzyme that helps to break down triglycerides. There is no effective therapy available. Additional information on FCS is available at www.fcsfocus.com. For a full list of organizations supporting the FCS community worldwide, please click here.

FPL is a severe, rare genetic metabolic disorder characterized by an inability of the body to store fat in normal locations. This results in high levels of triglycerides in the bloodstream, abnormal fat distribution around and within organs, such as the liver and heart, and a range of metabolic abnormalities, including severe insulin resistance. People with FPL are at increased risk of acute pancreatitis in addition to other long-term, progressive manifestations, such as premature cardiomyopathy, atherosclerosis, and liver disease. Additional information on FPL is available through Lipodystrophy United at http://www.lipodystrophyunited.org.

ABOUT AKCEA THERAPEUTICS

Akcea Therapeutics, an affiliate of Ionis Pharmaceuticals, Inc., is a biopharmaceutical company focused on developing and commercializing drugs to treat patients with serious cardiometabolic diseases caused by lipid disorders. Akcea is advancing a mature pipeline of four novel drugs, including volanesorsen, AKCEA-APO(a)-LRx, AKCEA-ANGPTL3-LRx and AKCEA-APOCIII-LRx, all with the potential to treat multiple diseases. All four drugs were discovered by and are being co-developed with Ionis, a leader in antisense therapeutics, and are based on Ionis' proprietary antisense technology. The most advanced drug in its pipeline, volanesorsen, is under regulatory review in the U.S., EU and Canada for the treatment of patients with familial chylomicronemia syndrome, or FCS, and is currently in Phase 3 clinical development for the treatment of patients with familial partial lipodystrophy, or FPL. Akcea is building the infrastructure to commercialize its drugs globally with a focus on lipid specialists as the primary call point. Akcea is located in Cambridge, Massachusetts. Additional information about Akcea is available at www.akceatx.com.

ABOUT IONIS PHARMACEUTICALS, INC.

Ionis is the leading company in RNA-targeted drug discovery and development focused on developing drugs for patients who have the highest unmet medical needs, such as those patients with severe and rare diseases. Using its proprietary antisense technology, Ionis has created a large pipeline of first-in-class or best-in-class drugs, with over three dozen drugs in development. SPINRAZA® (nusinersen) has been approved in global markets for the treatment of spinal muscular atrophy (SMA). Biogen is responsible for commercializing SPINRAZA. Drugs that have successfully completed Phase 3 studies include inotersen, an antisense drug Ionis is developing to treat patients with hereditary TTR amyloidosis (hATTR), and volanesorsen, an antisense drug discovered by Ionis and co-developed by Ionis and Akcea Therapeutics to treat patients with either familial chylomicronemia syndrome or familial partial lipodystrophy. Akcea, an affiliate of Ionis, is a biopharmaceutical company focused on developing and commercializing drugs to treat patients with serious cardiometabolic diseases caused by lipid disorders. If approved, volanesorsen will be commercialized through Ionis' affiliate, Akcea. Inotersen filings for marketing approval have been submitted in the U.S. and EU. Volanesorsen filings for marketing approval have been submitted in the U.S., EU, and Canada. Ionis' patents provide strong and extensive protection for its drugs and technology. Additional information about Ionis is available at www.ionispharma.com**.**

AKCEA'S FORWARD-LOOKING STATEMENT

This press release includes forward-looking statements regarding the business of Akcea Therapeutics, Inc. and the therapeutic and commercial potential of volanesorsen and other products in development. Any statement describing Akcea's 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. Akcea's 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 Akcea's forward-looking statements reflect the good faith judgment of its management, these statements are based only on facts and factors currently known by Akcea. As a result, you are cautioned not to rely on these forward-looking statements. These and other risks concerning Akcea's programs are described in additional detail in its final prospectus for its initial public offering and its most recent quarterly report on Form 10-Q, which is on file with the SEC.

IONIS' FORWARD-LOOKING STATEMENT

This press release includes forward-looking statements regarding the business of Akcea Therapeutics, Inc. and the therapeutic and commercial potential of volanesorsen and other products in development. Any statement describing Ionis' 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. Ionis' 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 Ionis' forward-looking statements reflect the good faith judgment of its management, these statements are based only on facts and factors currently known by Ionis. As a result, you are cautioned not to rely on these forward-looking statements. These and other risks concerning Ionis' programs are described in additional detail in Ionis' annual report on Form 10-K for the year ended December 31, 2016, 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, "Ionis", "Akcea," "Company," "Companies" "we," "our," and "us" refers to Ionis Pharmaceuticals and/or Akcea Therapeutics.

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Source: Akcea Therapeutics, Inc.

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