Madrigal Pharmaceuticals Announces Positive Outcome from Pre-Planned DSMB Safety Review and Completion of Enrollment of Phase 2 Study of MGL-3196 in Patients with Heterozygous Familial Hypercholesterolemia

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-- Second DSMB review includes data from both Phase 2 studies in NASH and HeFH --

-- Top-line results from NASH expected late 2017 and HeFH early 2018 --

CONSHOHOCKEN, Pa., Sept. 19, 2017 (GLOBE NEWSWIRE) -- Madrigal Pharmaceuticals, Inc. (Nasdaq:MDGL) today announced that the Company's independent Data Safety Monitoring Board (DSMB) held its second prespecified meeting to evaluate both the heterozygous familial hypercholesterolemia (HeFH) and non-alcoholic steatohepatitis (NASH) Phase 2 clinical trials and recommended that both studies continue without protocol modifications. Madrigal also announced that the Phase 2 study of MGL-3196 for the treatment of HeFH, a severe genetic dyslipidemia that causes early onset cardiovascular disease, has enrolled 113 patients, thereby exceeding the target patient enrollment of 105 patients, and will continue enrollment for the next several days. Top-line results from the study are expected in early 2018.

"Individuals with HeFH suffer from a life-long burden of cholesterol buildup and are at high risk of early coronary artery disease. While treatable with LDL-C lowering strategies, we estimate that more than one-third of HeFH patients do not achieve their cholesterol reduction goals," said John J. P. Kastelein, MD, Ph.D., FESC, Professor of Medicine in the Department of Vascular Medicine at the Academic Medical Center (AMC) of the University of Amsterdam and the principal investigator of the study. "We are hopeful that results from this Phase 2 study will support further development of MGL-3196 as a much needed additional oral agent to treat people with HeFH."

MGL-3196 is a first-in-class, oral, once-daily, liver-directed, thyroid hormone receptor (THR) β-selective agonist medication that has demonstrated significant LDL lowering in both clinical and preclinical studies. MGL-3196 is also in a fully enrolled Phase 2 clinical trial for the treatment of NASH.

"We are encouraged by the recommendation of our DSMB to continue both the NASH and HeFH clinical trials with no modifications to either protocol. In the HeFH study, we have exceeded target enrollment of patients who have not met treatment goals despite high intensity statin therapy, including up to 40 mg of rosuvastatin and 80 mg of atorvastatin, thus, providing opportunity for additional LDL cholesterol lowering in HeFH," stated Rebecca Taub, M.D., CMO and Executive VP, Research & Development, and founding scientist of Madrigal.

"We anticipate that the data from both the HeFH and NASH Phase 2 studies will confirm the potential therapeutic value of MGL-3196," stated Paul A. Friedman, M.D., Chairman and CEO of Madrigal. "We look forward to the potentially exciting opportunities for Madrigal as we advance through clinical development of this drug."

About the Phase 2 HeFH Study
The 12-week, randomized, double-blind, placebo-controlled, multi-center Phase 2 study was designed to enroll 105 patients with HeFH in three European countries. Patients are randomized in a 2:1 ratio to receive either MGL-3196 or placebo, in addition to their current drug regimen (including high dose statins and/or ezetimibe). The primary endpoint of the study is reduction of LDL cholesterol, with secondary endpoints including reductions in triglycerides, Lp(a), and ApoB, as well as safety. Lp(a) is a severely atherogenic lipid particle, commonly elevated in familial hypercholesterolemia patients, the levels of which are not adequately reduced by existing lipid lowering therapies. THR-β agonism is one of the few therapeutic approaches that can substantially lower Lp(a).

About HeFH
Heterozygous familial hypercholesterolemia (HeFH), and a much rarer form called homozygous familial hypercholesterolemia (HoFH), are severe genetic dyslipidemias typically caused by inactivating mutations in the LDL receptor. Both forms of FH lead to early onset cardiovascular disease. HeFH, the most common dominantly inherited disease, is present in up to 1 in 200 people; the disease is found in higher frequencies in certain more genetically homogenous populations. Treatments exist for both HeFH and HoFH but many patients (as many as 40 percent of HeFH patients) are not able to reach their cholesterol (LDL-C) reduction goals on these therapies, reflecting the lifetime burden of cholesterol buildup in their bodies.

About Madrigal Pharmaceuticals
Madrigal Pharmaceuticals, Inc. (Nasdaq:MGDL) is a clinical-stage biopharmaceutical company pursuing novel therapeutics that target a specific thyroid hormone receptor pathway in the liver, which is a key regulatory mechanism common to a spectrum of cardio-metabolic and fatty liver diseases with high unmet medical need. The Company's lead candidate, MGL-3196, is a first-in-class, orally administered, small-molecule, liver-directed, thyroid hormone receptor (THR) β-selective agonist that is currently in Phase 2 development for NASH and heterozygous familial hypercholesterolemia (HeFH). For more information, visit

www.madrigalpharma.com.

Forward-Looking Statements

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