



## Madrigal Pharmaceuticals Reports 2016 Fourth Quarter and Year-End Financial Results, Reviews Key Corporate Achievements and Provides Update on Lead Clinical-stage Compound, MGL-3196

April 3, 2017

*- MGL-3196, a liver-directed thyroid hormone receptor (THR) beta selective agonist, has the potential to treat NASH (non-alcoholic steatohepatitis) and familial hypercholesterolemia (FH) -*

*- Madrigal is well positioned to complete Phase 2 proof-of-concept trials for MGL-3196 in NASH and HeFH -*

CONSHOHOCKEN, Pa., April 03, 2017 (GLOBE NEWSWIRE) -- Madrigal Pharmaceuticals, Inc. (NASDAQ:MDGL) today announced its fourth quarter and year-end 2016 financial results. These results reflect the successful merger with Synta Pharmaceuticals on July 22, 2016, and the establishment of Madrigal as a leading cardiovascular-metabolic disease public company focused on NASH and other related lipid disorders, including heterozygous familial hypercholesterolemia (HeFH) and homozygous familial hypercholesterolemia (HoFH). During the second half of 2016, Madrigal initiated Phase 2 clinical development of its lead compound, MGL-3196, a first-in-class, oral, once-daily, liver-directed, thyroid hormone receptor (THR)  $\beta$ -selective agonist in patients with NASH.

"The completion of the merger with Synta has allowed us to rapidly advance MGL-3196 into two Phase 2 proof-of-concept clinical trials for patients with NASH and HeFH, while planning for a third Phase 2 trial in HoFH," said Paul Friedman, M.D., President and Chief Executive Officer of Madrigal. "Data from the NASH and HeFH trials are expected by year-end and should enable us to move forward with Phase 3 registration trials for these indications in 2018."

In 2016, Madrigal:

- Positioned the Company with sufficient capital to complete its NASH and HeFH Phase 2 trials and initiate the third Phase 2 trial in HoFH (more than \$40M at December 31, 2016);
- Established an experienced management team with proven track records in drug discovery, development and commercialization and significant expertise in liver diseases;
- Executed an exclusive worldwide license agreement with Tarveda for products based on the HSP90 Drug Conjugate program, reflecting Madrigal's strategy to create additional shareholder value by out-licensing its novel oncology assets; and
- Formed a strong Board of Directors with relevant expertise in drug development, strategic alliances and finance.

### Clinical Program Updates for MGL-3196

#### NASH

NASH is a common liver disease in the United States and worldwide, unrelated to alcohol use, that is characterized by a build-up of fat in the liver, inflammation, damage (ballooning) of hepatocytes and increasing fibrosis. Although people with NASH may feel well and often do not know they have the disease, NASH can lead to permanent damage, including cirrhosis and impaired liver function in a high percentage of NASH patients. In October 2016, the first patient was treated in Madrigal's Phase 2 trial of MGL-3196 for the treatment of NASH. The randomized, double-blind, placebo-controlled, multi-center study is expected to enroll up to 117 patients 18 years of age and older with biopsy-confirmed NASH and more than 10% liver fat as confirmed by a magnetic resonance imaging-proton density fat fraction (MRI-PDFF). Patients are randomized 2:1 to receive either MGL-3196 or placebo. The primary endpoint of the trial is the reduction of liver fat, assessed by MRI-PDFF at 12 weeks. Recent published data show a high correlation of reduction of liver fat measured by MRI-PDFF to NASH scoring on liver biopsy. Efficacy will be confirmed at the end of the trial (36 weeks) by repeat MRI-PDFF and conventional liver biopsy to examine histological evidence for the resolution of NASH. Additional secondary endpoints include changes in clinically relevant biomarkers at 12 and 36 weeks, improvement in fibrosis by at least one stage, improvement of NASH, and safety and tolerability.

"Because MGL-3196 selectively agonizes THR- $\beta$ , it has the potential to safely address key pathological mechanisms responsible for the progression of liver injury in NASH," said Rebecca Taub, M.D., CMO and Executive VP, Research & Development of Madrigal. "This activity includes reductions of lipid and lipotoxicity, inflammation, dysregulated liver cell death (apoptosis) and, ultimately, fibrosis."

#### HeFH

Heterozygous familial hypercholesterolemia (HeFH) is a severe genetic dyslipidemia, typically caused by an inactivating mutation in one copy of the LDL receptor gene that leads to early onset cardiovascular disease. With conventional therapy, including statins and ezetimibe, the majority of HeFH and virtually all HoFH patients fail to reach their cholesterol (LDL-C) reduction goals. Based on evidence of impressive LDL cholesterol lowering in Phase 1 and data suggesting that MGL-3196 has a mechanism of action

that is different from and complementary to statins, Madrigal is conducting a Phase 2 trial in HeFH. The 12-week, randomized, double-blind, placebo-controlled, multi-center study will enroll up to 105 patients with HeFH 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 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 and poorly controlled by existing lipid lowering therapies. THR- $\beta$  agonism is one of the few therapeutic approaches that can substantially lower Lp(a). As previously announced, the first patient in this study was dosed in February 2017.

#### HoFH

Homozygous familial hypercholesterolemia (HoFH) is a much rarer form of severe genetic dyslipidemia, which results from inactivating mutations in both copies of the LDL receptor gene, and can produce cardiovascular disease before age 20. The protocol for a Phase 2, open-label study of MGL-3196 in HoFH is in development. The 12-week trial will have endpoints similar to the HeFH study and is expected to begin enrolling patients by the end of 2017.

### Summary of 2016 Financial Results

#### Financial Results for the Three Months and Twelve Months Ended December 31, 2016

Operating expenses were \$7.8 million and \$25.2 million for the three month and twelve month periods ended December 31, 2016, respectively, compared to \$0.9 million and \$3.2 million in the comparable prior year periods.

Research and development expenses for the three month and twelve month periods ended December 31, 2016 increased to approximately \$5.5 million and \$15.9 million in 2016, as compared to \$0.8 million and \$2.4 million, respectively, in 2015. The increases are primarily attributable to higher expenses for personnel, particularly non-cash stock based compensation, and increased expenses for our preclinical and clinical development programs for MGL-3196 in both the three and twelve month periods ended December 31, 2016, as compared to the same periods in 2015.

General and administrative expenses for the three month and twelve month periods ended December 31, 2016 increased to approximately \$2.2 million and \$9.3 million in 2016 as compared to \$0.1 million and \$0.8 million, respectively, in 2015. The increase is primarily attributable to higher expenses for personnel, particularly non-cash stock based compensation, and professional services and other costs associated with the merger, in both the three and twelve month periods ended December 31, 2016, as compared to the same periods in 2015.

Interest income (expense), net, for the three month and twelve month periods ended December 31, 2016 was \$7 thousand and \$(1.2) million, respectively, as compared to \$(1.0) million and \$(3.6) million, respectively, for the same periods in 2015. The decreases in interest expense in the 2016 periods were due to the conversion of convertible debt to shares of common stock in connection with the merger, which closed on July 22, 2016.

#### Forward-Looking Statements

*This communication contains "forward-looking statements" made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements reflect management's current knowledge, assumptions, judgment and expectations regarding future performance or events. Although management believes that the expectations reflected in such statements are reasonable, they give no assurance that such expectations will prove to be correct and you should be aware that actual results could differ materially from those contained in the forward-looking statements. Forward-looking statements are subject to a number of risks and uncertainties including, but not limited to, the company's clinical development of MGL-3196, the timing and outcomes of clinical studies of MGL-3196, and the uncertainties inherent in clinical testing. Undue reliance should not be placed on forward-looking statements, which speak only as of the date they are made. Madrigal undertakes no obligation to update any forward looking statements to reflect new information, events or circumstances after the date they are made, or to reflect the occurrence of unanticipated events. Please refer to Madrigal's filings with the U.S. Securities and Exchange Commission for more detailed information regarding these risks and uncertainties and other factors that may cause actual results to differ materially from those expressed or implied.*

(Tables Follow)

**Madrigal Pharmaceuticals, Inc.**  
**Condensed Consolidated Statements of Operations**  
**(in thousands, except share and per share amounts)**  
**(unaudited)**

Three Months Ended December 31,		Twelve Months Ended December 31,	
2016	2015	2016	2015

Revenues:

Total revenues	\$	-	\$	-	\$	-	\$	-
Operating expenses:								
Research and development		5,524		773		15,934		2,427
General and administrative		2,232		145		9,290		806
Total operating expenses		<u>7,756</u>		<u>918</u>		<u>25,224</u>		<u>3,233</u>
Loss from operations		(7,756)		(918)		(25,224)		(3,233)
Interest income (expense), net		7		(965)		(1,164)		(3,612)
Net loss	\$	<u>(7,749)</u>	\$	<u>(1,883)</u>	\$	<u>(26,388)</u>	\$	<u>(6,845)</u>
Basic and diluted net loss per common share	\$	(0.67)	\$	(10.86)	\$	(5.07)	\$	(40.03)
Basic and diluted weighted average number of common shares outstanding		11,509,791		173,341		5,204,644		171,012

**Madrigal Pharmaceuticals, Inc.**  
**Condensed Consolidated Balance Sheets**  
(in thousands)

	<b>December 31, 2016</b>	<b>December 31, 2015</b>
<b>Assets</b>		
Cash, cash equivalents and marketable securities	\$ 40,499	\$ 306
Other current assets	708	58
Other non-current assets	3	-
Total assets	<u>\$ 41,210</u>	<u>\$ 364</u>
<b>Liabilities and Equity</b>		
Current liabilities	\$ 4,800	\$ 49,277
Long-term liabilities	-	-
Stockholders' equity	36,410	(48,913)
Total liabilities and Stockholders' equity	<u>\$ 41,210</u>	<u>\$ 364</u>

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