



Amicus Therapeutics Commences Phase 3 Trial Evaluating Amigal(TM) for the Treatment of Fabry Disease

-- FDA Agreement Reached on Phase 3 Study Design, Primary Endpoint and Histological Methodology -

CRANBURY, N.J., June 22, 2009 /PRNewswire-FirstCall via COMTEX News Network/ -- Amicus Therapeutics (Nasdaq: FOLD) today announced it has commenced the U.S. registration Phase 3 trial with its investigational drug, Amigal(TM) (migalastat hydrochloride) for the treatment of Fabry disease. The Company has reached agreement with the U.S. Food and Drug Administration (FDA) on the key protocol design elements of the pivotal trial, including the use of the surrogate primary endpoint of the change in the amount of kidney interstitial capillary GL-3, the substrate that accumulates in the cells of Fabry patients. In addition, the FDA is in agreement that the Company is eligible to seek Accelerated Approval for Amigal according to Subpart H regulations. The Company has begun submitting the Phase 3 protocol to investigational sites worldwide and expects to begin the dosing of subjects in the second half of this year.

John F. Crowley, President and CEO of Amicus stated, "The start of our Phase 3 trial with Amigal is a major milestone for Amicus and highlights our transition into a late-stage development company." Crowley continued, "We are very pleased with the outcome of our interactions with FDA around the design of this pivotal study and are confident we have set the stage for a successful Phase 3 study. We continue to believe that Amigal may be an important treatment option for patients who suffer with Fabry disease and a significant step forward for them and their families."

Raphael Schiffmann, MD, Director of the Institute of Metabolic Disease, Baylor Health Care System Foundation, commented, "Having been involved in Fabry research for more than 15 years and considering the Phase 2 data with migalastat, I am pleased that the Phase 3 trial is starting and look forward to continued involvement with this novel approach for the treatment of Fabry disease."

Amigal U.S. Registration Phase 3 Trial Design

The Phase 3 trial will evaluate the efficacy, safety and pharmacodynamics of Amigal in males and females with Fabry disease. This trial will consist of a six-month double-blind, randomized, placebo-controlled treatment stage and will enroll approximately 60 subjects who are naive to enzyme replacement therapy (ERT) or who have not received ERT for at least six months prior to the start of treatment with Amigal. The Amigal treatment arm dose and regimen will be 150 mg every other day.

The primary endpoint will be the change in the amount of kidney interstitial capillary GL-3 as measured in kidney biopsies using histology. Secondary endpoints will include safety and tolerability, kidney GL-3 as measured in urine, and an assessment of renal function (including glomerular filtration rate (GFR) and 24-hour urine protein).

Additionally, the FDA and Amicus reached agreement on an improved methodology for the histological evaluation of GL-3 in the kidney biopsies. An analysis of the Phase 2 and Phase 2 extension study biopsies using the improved methodology demonstrated that all of the evaluable baseline samples had detectable interstitial capillary GL-3 and that reductions were observed in 8 of the 9 responders.

According to Laura Barisoni, MD, Assistant Professor in Pathology and Medicine, Director, Nephropathology Service, Department of Pathology, New York University School of Medicine, "The Phase 2 data using the improved methodology for histological evaluation of GL-3 in kidney biopsies were very encouraging and provide added confidence in the planned Phase 3 study."

It is expected that approximately 30 clinical sites worldwide will participate in this trial.

European Phase 3 Registration Trial Update

Amicus and its partner, Shire Human Genetic Therapies, Inc. (Shire HGT), have completed a series of discussions with the European Medicines Agency (EMA). Based on feedback from the EMA, the Companies expect a separate clinical study will be required for Amigal registration in Europe.

The EMA has recommended a registration trial evaluating the safety and efficacy of Amigal in males and females with Fabry

disease as compared to enzyme replacement therapy (ERT). The Agency agrees that the trial may enroll subjects currently receiving ERT. The recommended primary endpoint is renal function as measured by glomerular filtration rate (GFR) and the recommended primary analysis is a comparison of outcomes between the Amigal and ERT groups using descriptive statistics.

Amicus and Shire HGT are reviewing the final EMEA feedback and will provide an update regarding plans for registration in Europe in the second half of 2009.

About Amigal

Amigal has undergone clinical testing in a series of Phase 2 studies. Twenty-six male and female subjects were included in these studies and studied initially for either 12 or 24 weeks. Twenty-three of the 26 subjects continue to receive treatment in an ongoing extension study designed to evaluate the long-term safety and efficacy of Amigal. Fifteen of the 23 subjects have been on treatment for at least two years and five subjects have been on treatment for more than three years.

Results from the Phase 2 and the extension study were presented in March 2009 at the American College of Medical Genetics (ACMG) Annual Meeting in Tampa, FL. Specifically, Amicus reported that treatment with Amigal was generally well-tolerated, with no drug-related serious adverse events. The most common adverse events were headache, arthralgia and diarrhea. In subjects identified as responders to Amigal, treatment resulted in increased levels of the target enzyme (a-Gal A), as measured in white blood cells and in the kidney, and reduced levels of the target substrate (GL-3), as measured in renal interstitial capillary cells from kidney biopsies and in urine.

About Fabry Disease

Fabry disease is a lysosomal storage disorder caused by inherited genetic mutations in the GLA gene, which result in deficient activity of the enzyme alpha-galactosidase A (a-Gal A). Deficient a-Gal A activity leads to lysosomal accumulation of globotriaosylceramide (GL-3), which is believed to cause the various symptoms of Fabry disease, including pain, kidney failure and increased risk of heart attack and stroke. Amigal is designed to selectively bind to and stabilize a-Gal A, which facilitates proper trafficking of the enzyme to the lysosomes, where it is needed to break down GL-3.

Fabry disease is estimated to affect approximately 5,000 to 10,000 people in the developed world, but recent evidence suggests that the disease may be significantly under-diagnosed. The U.S. Food and Drug Administration's Office of Orphan Products Development has granted orphan designation for Amigal in the United States, and the European Commission has designated Amigal as an orphan medicinal product in the European Union.

Shire HGT Collaboration

In November 2007, Amicus entered into a strategic collaboration with Shire Human Genetic Therapies, Inc., a wholly-owned subsidiary of Shire plc, to jointly develop Amicus' three lead pharmacological chaperone compounds for lysosomal storage disorders, Amigal, Plicera and AT2220. Under the terms of the collaboration Shire will pay development and sales milestones up to a maximum of \$390 million, and will also pay tiered, double digit royalties on net sales of the products. Shire also shares world-wide development costs on a 50/50 basis, and in return Shire received rights to commercialize these products outside of the U.S. while Amicus retains all rights to commercialize these products in the U.S. In addition, Amicus leads development operations through the end of Phase 2 clinical trials. The companies then share responsibility for Phase 3 clinical trial development leveraging Shire's significant ex-U.S. regulatory and clinical experience as well as its commercial infrastructure.

About Amicus Therapeutics

Amicus Therapeutics is a biopharmaceutical company developing novel, oral therapeutics known as pharmacological chaperones for the treatment of a range of human genetic diseases. Pharmacological chaperone technology involves the use of small molecules that selectively bind to and stabilize proteins in cells, leading to improved protein folding and trafficking, and increased activity. Amicus is initially targeting lysosomal storage disorders, which are severe, chronic genetic diseases with unmet medical needs.

Amicus has a strategic collaboration with Shire Human Genetic Therapies, Inc., a wholly-owned subsidiary of Shire Limited, to develop and commercialize Amicus' three lead pharmacological chaperone compounds for lysosomal storage disorders. Under the agreement, Shire received commercial rights outside of the United States. Amicus retains all U.S. rights.

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as, but not limited to, "look forward to," "believe," "expect," "anticipate," "estimate," "intend," "plan," "targets," "likely," "will," "would," "should" and "could," and similar expressions or words identify forward-looking statements. Such forward-looking statements are based upon current expectations that involve risks, changes in circumstances, assumptions and

uncertainties. The inclusion of forward-looking statements should not be regarded as a representation by Amicus that any of its plans will be achieved. Any or all of the forward-looking statements in this press release may turn out to be wrong. They can be affected by inaccurate assumptions Amicus might make or by known or unknown risks and uncertainties. For example, with respect to statements regarding the goals, progress, timing and outcomes of ongoing discussions with regulatory authorities and the potential goals, progress, timing and results of clinical trials, actual results may differ materially from those set forth in this release due to the risks and uncertainties inherent in the business of Amicus, including, without limitation: the potential that data from the phase 3 trial design for Amigal is insufficient to support regulatory approval; the potential that results of clinical or pre-clinical studies indicate that the product candidates are unsafe or ineffective; and, our dependence on third parties in the conduct of our clinical studies. Further, the results of earlier clinical trials and studies may not be predictive of future results. Additionally, all forward looking statements are subject to other risks detailed in our Annual Report on Form 10-K for the year ended December 31, 2008, and our other public filings with the Securities and Exchange Commission. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. All forward-looking statements are qualified in their entirety by this cautionary statement, and Amicus undertakes no obligation to revise or update this news release to reflect events or circumstances after the date hereof. This caution is made under the safe harbor provisions of Section 21E of the Private Securities Litigation Reform Act of 1995.

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