Orphazyme announces topline data from pivotal trial of arimoclomol in Amyotrophic Lateral Sclerosis (ALS)

May 7, 2021

Orphazyme A/S
Company announcement
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- *Pivotal trial did not meet primary and secondary endpoints evaluating impact on function and survival*
- *Orphazyme remains focused on commercial readiness and potential U.S. approval of arimoclomol for Niemann-Pick disease type C (NPC) in June*

Copenhagen – May 7, 2021 – Orphazyme A/S (ORPHA.CO; ORPH), a late-stage biopharmaceutical company pioneering the heat shock protein response for the treatment of rare diseases, today announced that the ORARIALS-01 pivotal trial of arimoclomol in amyotrophic lateral sclerosis (ALS) did not meet its primary and secondary endpoints to show benefit in people living with ALS. No important safety signals were reported in the trial. Topline data will be presented at the upcoming virtual European Network to Cure ALS (ENCALS) meeting, May 12-14, and complete data from the study will be published later this year.

"We are disheartened by these results, as we had hoped arimoclomol might represent a viable new approach against the formidable challenge of this devastating disease. We express our sincere thanks to the investigators, patients and families for their participation and collaboration in our program," said Thomas Blaettler, MD, Chief Medical Officer, Orphazyme. "With over 18 months of evaluation, this trial represents one of the longest running clinical studies in this category. While unsuccessful, the data generated will contribute meaningfully to the scientific dialogue on this challenging disease. We will apply the invaluable insights from this and other studies to further our pipeline as we continue to pursue the full potential of the heat shock protein response."

The randomized, placebo-controlled Phase 3 trial was conducted among 245 patients at 29 sites in 12 countries in North America and Europe. Participants were randomized (2:1 ratio) to receive either arimoclomol (248 mg three times daily)[i] or placebo for up to 76 weeks. The primary endpoint was to determine the efficacy of chronic treatment with arimoclomol compared to placebo in participants with ALS as assessed by the combined assessment of function and survival (CAFS). This endpoint was selected to illustrate the overall treatment effect based on survival and the change in the ALS Functional Rating Scale-Revised (ALSFRS-R) score. Secondary endpoints included survival, change in ALSFRS-R, and slow vital capacity (SVC).

Orphazyme's applications for arimoclomol (to be branded MIPLYFFA ™)[ii] for Niemann-Pick disease type C (NPC) are under priority review with the U.S. Food and Drug Administration, with an expected PDUFA action date of June 17 2021, as well as with the European Medicines Agency, with an opinion from the Committee for Medicinal Products for Human Use (CHMP) expected later this year.

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About Orphazyme A/S
Orphazyme is a late-stage biopharmaceutical company pioneering the heat shock protein response for the treatment of rare diseases. The company is harnessing amplification of heat shock proteins (or HSPs) to develop and commercialize novel therapeutics for diseases caused by protein misfolding, protein aggregation, and lysosomal dysfunction, including lysosomal storage diseases. Arimoclomol, the company's lead candidate, is in clinical development for Niemann-Pick disease type C (NPC) and Gaucher disease. Orphazyme is headquartered in Denmark and has operations in the U.S. and Switzerland. Orphazyme's shares are listed on Nasdaq U.S. (ORPH) and Nasdaq Copenhagen (ORPHA.CO).

About arimoclomol
Arimoclomol is an investigational drug candidate that amplifies the production of heat shock proteins (HSPs). HSPs can rescue defective misfolded proteins, clear protein aggregates, and improve the function of lysosomes. Arimoclomol is administered orally, and has now been studied in 10 phase 1, four phase 2 and three pivotal phase 2/3 trials. Arimoclomol is in clinical development for NPC and Gaucher disease. Arimoclomol has received orphan drug designation (ODD) for NPC in the US and EU. Arimoclomol has received fast-track designation (FTD) from the U.S. Food and Drug Administration (FDA) for NPC. In addition, arimoclomol has received breakthrough therapy designation (BTD) and rare-pediatric disease designation (RPDD) from the FDA for NPC. Arimoclomol is an investigational treatment and has not been approved by the FDA.

About ALS
Amyotrophic lateral sclerosis (ALS) is a rare, rapidly progressive, and always fatal neurodegenerative disease. Protein misfolding and aggregation in motor neurons are hypothesized to be important contributors to the disease process, which ultimately leads to paralysis of skeletal muscles as well as the muscles that enable breathing. The patient population in Europe and the United States is estimated to be approximately 50,000 patients. Currently, there are only limited treatment options available. Arimoclomol has been granted Orphan Drug Designation (EU and US) for the treatment of ALS.

Forward-looking statement
This company announcement may contain certain forward-looking statements, including in respect of the expected PDUFA action date of June 17 2021 for arimoclomol for the treatment of NPC, the potential U.S. approval of arimoclomol in June and the opinion from the Committee for Medicinal Products for Human Use (CHMP) later this year. Although the Company believes its expectations are based on reasonable assumptions, all statements other than statements of historical fact included in this company announcement about future events are subject to (i) change without notice and (ii) factors beyond the Company's control. These statements may include, without limitation, any statements preceded by, followed by, or including words such as "target," "believe," "expect," "aim," "intend," "may," "anticipate," "estimate," "plan," "project," "will," "can have," "likely," "should," "would," "could", and other words and terms of similar meaning or the negative thereof. Forward-looking statements are subject to inherent risks and uncertainties beyond the Company's control that could cause the Company's actual results, performance, or achievements to be materially different from the expected results, performance, or achievements expressed or implied by such forward-looking statements. Except as required by law, the Company assumes no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.

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[i] Arimoclomol citrate 400 mg three times daily

[ii] MIPLYFFA is a trademark or registered trademark of Orphazyme A/S. The global brand "MIPLYFFA" has received conditional approval from the U.S. Food and Drug Administration; the brand name will be used commercially upon approval for NPC.

Attachment

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