

Company announcement
No. 12/2018

Orphazyme A/S
Ole Maaløes Vej 3
DK-2200 Copenhagen N

www.orphazyme.com
Company Registration No. 32266355

Orphazyme reports encouraging arimoclomol clinical trial top-line data in Niemann-Pick disease Type C (NPC)

- *Arimoclomol was well-tolerated in patients with the rare disease NPC*
- *The NPC Phase II/III trial top-line results show a treatment benefit of arimoclomol over placebo on the primary endpoint 5-domain NPC Clinical Severity Scale (NPC-CSS) (p -value 0.07)*
- *Albeit statistical significance of 0.05 was not reached, Orphazyme will engage in dialogue with health authorities in the EU and US to determine the best path towards making arimoclomol available to patients with NPC*

Copenhagen, September 28, 2018 – Orphazyme A/S, a biopharmaceutical company dedicated to developing treatments for patients living with rare diseases, today announced encouraging top-line results for its clinical Phase II/III trial with orally administered arimoclomol for the treatment of patients with Niemann-Pick disease Type C (NPC).

The trial was a multi-center, prospective, double-blinded, placebo-controlled interventional study with a 12-month duration. In total, 50 patients were enrolled in the EU and US. The purpose of the trial was to assess the efficacy and safety of arimoclomol, compared to placebo, in the treatment of NPC, administered in addition to the patient's standard-of-care. The primary endpoints, 5-domain NPC-CSS and Clinical Global Impression of Improvement (CGI-I), evaluated the treatment difference between the arimoclomol-treated and the placebo group after 12 months of treatment.

Overall, baseline characteristics were well-balanced across treatment arms. Arimoclomol was well-tolerated. The overall incidence of adverse events (AEs) was similar for arimoclomol (85.7%) and placebo (81.3%). Serious AEs occurred less frequently in the arimoclomol group (14.3%) compared to placebo (37.5%). The top-line data demonstrated a 74% reduction in progression on the primary endpoint, corroborated by consistent benefit across sub-populations. Placebo progression rates on the CGI-I were lower than expected impeding the ability to show a positive effect.

The full data set, including biomarker data, will become available and be analyzed in Q4 2018. Furthermore, 24-month data will become available from the on-going open-label extension trial in Q2 2019.

Anders Hinsby, Chief Executive Officer of Orphazyme, said: *"We are highly encouraged that the top-line data show a strong positive trend on the 5-domain NPC-CSS. We now look forward to receiving the full analysis of data. In addition, the open-label extension trial will provide data on the clinical benefit of arimoclomol over a longer period of time. We are determined to make arimoclomol available to patients as quickly as possible. We are grateful for the strong support we have received from the patient community, the expert physicians, and especially the participants and their families".*

Orphazyme will engage with the US Food and Drug Administration (FDA) and the European Medicines Agency (EMA) to determine the best path towards making arimoclomol available to those suffering from NPC.

Thomas Blaettler, Chief Medical Officer of Orphazyme, said: *“We observed compelling, clinically-relevant trends in favor of arimoclomol in this first trial in NPC. I am encouraged by the 74% reduction in disease progression on the 5-domain NPC-CSS. This is further corroborated by a similar effect on the full scale. Assessing the effect in patients 4 years of age and older (44 out of 50 patients), the effect becomes even more pronounced, with a p-value of 0.027”*.

This company announcement does not impact the 2018 financial guidance published in the Annual Report 2017 on March 15, 2018.

Conference call

Orphazyme will be hosting an investor call at which Chief Executive Officer, Anders Hinsby, and Chief Medical Officer, Thomas Blaettler, will be presenting the clinical trial top-line data in NPC. The presentation will be followed by a Q&A session.

The call will be held on: **Friday, September 28, 2018 at 10.00 AM CET.**

Dial-in details:

- Denmark: +45 35 15 80 49
- United Kingdom: +44 (0) 330 336 9128
- United States: +1 929-477-0448

Event Title: Orphazyme Phase II/III clinical trial top-line data in NPC

Confirmation code: **7938836**

The presentation will also be available via webcast: <https://edge.media-server.com/m6/p/nmfk5ydm>

After the call, the presentation will be available by using the following dial-in details:

- Denmark: +45 70 14 50 87
- United Kingdom: +44 (0) 207 660 0134
- United States: +1 719-457-0820

Confirmation code: 7938836

For additional information, please contact

Orphazyme A/S

Anders Hinsby, CEO

+45 31 44 31 39

About Orphazyme A/S

Orphazyme is a biopharmaceutical company focused on bringing novel treatments to patients living with life-threatening or debilitating rare diseases. Our research focuses on developing therapies for diseases caused by misfolding of proteins and lysosomal dysfunction. Arimoclomol, the company's lead candidate, is in clinical development for four orphan diseases: Niemann-Pick disease Type C, Gaucher disease, sporadic Inclusion Body Myositis, and Amyotrophic Lateral Sclerosis. The Denmark-based company is listed on Nasdaq Copenhagen (ORPHA.CO). For more information, please visit www.orphazyme.com.

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, crosses the blood brain barrier, and has been studied in seven Phase I and three Phase II trials. Arimoclomol is in clinical development for NPC, Gaucher disease, sIBM, and ALS.

About NPC

Niemann-Pick disease Type C (NPC) is a genetic, progressively debilitating, and often fatal neurovisceral disease. It belongs to a family known as lysosomal storage diseases and is caused by mutations leading to defective NPC protein. As a consequence, lipids that are normally cleared by the lysosome build-up in tissues and organs, including the brain, and drive the disease pathology. The estimated prevalence of NPC in the USA and Europe combined is 1,000-2,000. There are no approved treatments for NPC in the USA and only one approved product in Europe. Arimoclomol has been granted Orphan Drug Designation (EU and USA), Rare Pediatric Disease Designation (USA), and Fast Track designation (USA) for the treatment of NPC.

Forward-looking statement

This company announcement may contain certain forward-looking statements. 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.