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September 28, 2020

U.S. Securities and Exchange Commission Division of Corporation Finance Office of Life Sciences 100 F Street, N.E. Mail Stop 4546 Washington, D.C. 20549

Attn: Mr. Alan Campbell Ms. Christine Westbrook

Mr. David Burton Ms. Mary Mast

Re: Orphazyme A/S

Amendment No. 4 to Registration Statement on Form F-1

Filed September 25, 2020 File No. 333-248607

Ladies and Gentlemen:

On behalf of our client, Orphazyme A/S (the "Company"), we are responding to the comments (the "Comments") of the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") contained in its letter dated September 28, 2020 (the "Comment Letter"), relating to the above referenced Amendment No. 4 to the Registration Statement on Form F-1 (the "Registration Statement"). In response to the Comments set forth in the Comment Letter, the Company has revised the Registration Statement and is filing via EDGAR Amendment No. 5 to the Registration Statement (the "Amended Registration Statement") with this response letter.

Set forth below are the Company's responses to the Comments. The numbering of the paragraphs below corresponds to the numbering of the Comments, which for your convenience we have incorporated into this response letter. Page references in the text of this response letter correspond to the page numbers of the Amended Registration Statement. Capitalized terms used but not defined herein are used herein as defined in the Amended Registration Statement.

Prospectus Summary

Recent Developments, page 6

1. Please update your disclosure here to include a discussion of the delay of your QT trial with arimoclomol, including the FDA's request for reports by October 1, 2020, your anticipated inability to meet such timeline, as referenced on page 17, and the potential impact of the delay in the QT trial. Please also describe the potential QT safety signal with arimoclomol.

Response to Comment 1

In response to the Staff's comment, the Company has revised page 6 of the Amended Registration Statement as requested.

* * * *

VIA EDGAR



Please direct any questions or comments concerning the Amended Registration Statement or this response letter to either the undersigned at (212) 479-6495 or Divakar Gupta at (212) 479-6474.

Very truly yours,

/s/ Josh Kaufman

Josh Kaufman

Anders Vadsholt, Orphazyme A/S
Anders Vadsholt, Orphazyme A/S
Divakar Gupta, Cooley LLP
Alison Haggerty, Cooley LLP
Mark Ballantyne, Cooley LLP
Ilir Mujalovic, Shearman & Sterling LLP