UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

August 20, 2020

Kim Stratton
Chief Executive Officer
Orphazyme A/S
Ole Maaløes Vej 3, DK-2200
Copenhagen N
Denmark

Re: Orphazyme A/S
Amendment No. 1 to Draft Registration Statement on Form F-1
Submitted August 5, 2020
CIK No. 0001764791

Dear Ms. Stratton:

We have reviewed your amended draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Amendment No. 1 to Draft Registration Statement on Form S-1 submitted August 5, 2020

Prospectus Summary
Overview, page 1

1. We note your response to prior comment 3 and re-issue in part. Please revise your statements regarding your belief that arimoclomol has an acceptable safety profile to remove any implication that your product candidate is safe. We will not object to disclosure indicating, if accurate, that arimoclomol has been well-tolerated in clinical trials.

We further note that you continue to refer to the observation of the "clinically meaningful results" and "clinically meaningful benefits" of arimoclomol. It is inappropriate for you to state or imply that your product candidates are effective or are likely to be found effective. Please remove such statements from your document. You may present clinical trial end points and objective data result from your clinical trials with concluding that the results establish efficacy.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Asset Purchase Agreement with CytRx, page 79

2. Please update your description of the Asset Purchase Agreement with CytRx to describe the non-royalty licensing fee in Section 2.14 of the agreement. Please quantify the non-royalty licensing fee percentage at a range of no greater than 10 percentage points.

Business, page 115

3. We note your updated disclosure in your descriptions of your clinical trials of arimoclomol for ALS and sIBM with respect to the observance of increased transaminases. Please update your disclosure to discuss the potential risks to your product candidate development, including risks related to clinical trial subjects and to regulatory approval, if transaminase elevations in trial subjects are determined to be related to arimoclomol as further data becomes available.

Sales and Marketing, page 120

4. We note your disclosure regarding your entry into U.S. distribution and specialist pharmacy partnerships. Please describe the material terms of the agreements underlying these partnerships.

You may contact David Burton at 202-551-3626 or Mary Mast at 202-551-3613 if you have questions regarding comments on the financial statements and related matters. Please contact Alan Campbell at 202-551-4224 or Christine Westbrook at 202-551-5019 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Joshua A. Kaufman, Esq.