

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

**POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-8 REGISTRATION
STATEMENT NO. 333-249407
POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-8 REGISTRATION
STATEMENT NO. 333-255661**

*UNDER
THE SECURITIES ACT OF 1933*

Orphazyme A/S
(Exact Name of Registrant as Specified in its Charter)

Not Applicable
(Translation of Registrant's Name into English)

The Kingdom of Denmark
(State or other Jurisdiction of
Incorporation or Organization)

2834
(Primary Standard Industrial
Classification Code Number)

Not Applicable
(I.R.S. Employer
Identification Number)

**Ole Maaløes Vej 3, DK-2200
Copenhagen N
Denmark**
Tel: +45 39178272
(Address and telephone number of Registrant's principal executive offices)

**Orphazyme A/S – Long-Term Incentive Program
Orphazyme A/S – Share-based Incentive Program for the Board of Directors
Orphazyme A/S – Long-Term Incentive Program for 2021
Orphazyme A/S – Share-based Incentive Program for the Board of Directors for 2021**
(Full title of the plans)

**Orphazyme US, Inc.
80 N. LaSalle Street, Suite 3475
Chicago, Illinois 60601
Tel: (773) 770-6888**
(Name, address, and telephone number of agent for service)

Copies to:

**Joshua A. Kaufman
Divakar Gupta
Mark Ballantyne
Cooley LLP
55 Hudson Yards
New York, New York 10001
+1 212 479-6000**

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

These Post-Effective Amendments relate to the following Registration Statements on Form S-8 (collectively, the “Registration Statements”), filed by Orphazyme A/S (the “Registrant”) with the Securities and Exchange Commission (the “SEC”):

- Registration Statement on Form S-8 (File No. 333-249407), filed with the SEC on October 9, 2020, registering 400,000 of the Registrant’s ordinary shares, including ordinary shares represented by American Depositary Shares, issuable under the Orphazyme A/S - Long-Term Incentive Program and Orphazyme A/S - Share-based Incentive Program for the Board of Directors; and
- Registration Statement on Form S-8 (File No. 333-255661), filed with the SEC on April 30, 2021, registering 990,000 ordinary shares, including ordinary shares represented by American Depositary Shares, issuable under the Registrant’s Orphazyme A/S - Long-Term Incentive Program for 2021 and Orphazyme A/S - Share-based Incentive Program for the Board of Directors for 2021.

In accordance with undertakings made by the Registrant in each the Registration Statements to remove from registration, by means of a post-effective amendment, any of the securities that were registered for issuance that remain unsold at the termination of the offering, the Registrant hereby removes from registration all of such securities of the Registrant registered but unsold under each of the Registration Statements. As a result of this deregistration, no securities remain registered for sale pursuant to the Registration Statements.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing of these amendments to Form S-8 and has duly caused these Registration Statement amendments to be signed on its behalf by the undersigned, thereunto duly authorized, in Copenhagen, Denmark, on March 21, 2022.

ORPHAZYME A/S

By: /s/ Anders Vadsholt
Anders Vadsholt
Chief Executive Officer and Chief Financial Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Anders Vadsholt</u> Anders Vadsholt	Chief Executive Officer and Chief Financial Officer (Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)	March 21, 2022
<u>*</u> Georges Gemayel	Chairman of the Board of Directors	March 21, 2022
<u>*</u> Bo Jesper Hansen, Ph.D., M.D.	Deputy Chairman of the Board of Directors	March 21, 2022
<u>*</u> Carolee Barlow	Director	March 21, 2022
<u>*</u> Martin Bonde, Ph.D.	Director	March 21, 2022

* By: /s/ Anders Vadsholt
Anders Vadsholt
Attorney-in-Fact