Issuer Free Writing Prospectus dated September 23, 2020
Filed Pursuant to Rule 433 under the Securities Act of 1933
Relating to the Preliminary Prospectus dated September 21, 2020
Registration Statement No. 333-248607

ORPHAZYME A/S

This free writing prospectus relates only to, and should be read together with, the preliminary prospectus dated September 21, 2020 (the "Preliminary Prospectus") included in Amendment No. 1 to the Registration Statement on Form F-1 (File No. 333-248607) (the "Registration Statement") relating to the initial public offering of the ordinary shares (which may be represented by American Depositary Shares) of Orphazyme A/S (the "Company"). On September 23, 2020, the Company filed Amendment No. 2 to the Registration Statement on Form F-1 relating to relating to the initial public offering of the ordinary shares (which may be represented by American Depositary Shares), which Amendment No. 2 includes an update to the Preliminary Prospectus, which is referred to as the "Updated Preliminary Prospectus". Amendment No. 2, including the Updated Preliminary Prospectus, may be accessed through the following link:

https://www.sec.gov/Archives/edgar/data/1764791/000119312520252088/d927161df1a.htm

The Updated Preliminary Prospectus contains certain updates, including to the Use of Proceeds section. This free writing prospectus provides such changes but should be read together with the Updated Preliminary Prospectus included in the Registration Statement. Capitalized terms used, but not defined, herein have the meanings set forth in the Updated Preliminary Prospectus.

Use of proceeds: We expect to use the net proceeds from the global offering, together with our existing cash, as follows:

- approximately $35 million to $40 million to continue the regulatory approval process for and fund the commercial launch, if approved, of arimoclomol for the treatment of NPC;
- approximately $10 million to $15 million to advance the clinical development of arimoclomol for the treatment of ALS;
- approximately $8 million to $12 million to advance the clinical development of arimoclomol for the treatment of sIBM;
- approximately $2 million to $3 million to advance the clinical development of arimoclomol for the treatment of neurological Gaucher disease; and
- the remaining amounts for working capital and general corporate purposes, including to fund the development of our next generation of HSP amplifiers.

Based on our current operating plan, we believe that the net proceeds from the global offering, together with our existing cash, will enable us to fund our planned operating expenses and capital expenditures through the next 24 months. The net proceeds from the global offering, together with our existing cash, may be insufficient to fund our product candidate through regulatory approval for one or more indications. We anticipate these funds will be sufficient to fund the commercial launch, if approved, of arimoclomol for the treatment of NPC. We also anticipate these funds will be sufficient to fund the completion of our Phase 3 trial of arimoclomol for the treatment of ALS, completion of our Phase 2/3 trial of arimoclomol for the treatment of sIBM and the initiation of pivotal-stage clinical development of arimoclomol for the treatment of neurological Gaucher disease. We anticipate that we will need additional funds to obtain regulatory approval of arimoclomol for the treatment of ALS, obtain regulatory approval of arimoclomol for the treatment of sIBM and complete the pivotal-stage clinical development of arimoclomol for the treatment of neurological Gaucher disease. It is difficult to predict the cost and timing required to complete development and obtain regulatory approval of, and commercialize, our product candidate due to, among other factors, the relatively short history of our experience with initiating, conducting and completing clinical trials, obtaining regulatory approval and commercializing our product candidate, the rate of subject enrollment in our clinical trials, filing requirements with various regulatory agencies, clinical trial results and the actual costs of manufacturing and supplying our product candidate.

The Company has filed a registration statement (including a prospectus) with the SEC relating to the offering of its ordinary shares (which may be represented by American Depositary Shares) to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the Company has filed with the SEC for more complete information about the Company and the offering of its ordinary shares (which may be represented by American Depositary Shares). You may obtain these documents for free by visiting EDGAR on the SEC's Website at www.sec.gov. Alternatively, the Company, any underwriter, or any dealer participating in the offering will arrange to send you the prospectus if you request it from BofA Securities, NC1-004-03-43, 200 North College Street, 3rd floor, Charlotte, NC 28255-0001, Attn: Prospectus Department, or by email at dg.prospectus_requests@bofa.com; Cowen, c/o Broadridge Financial Solutions, Attn: Prospectus Department, 1155 Long Island Avenue, Edgewood, NY 11717, by email at PostSaleManualRequests@broadridge.com or by telephone at (833) 297-2926; or Guggenheim Securities, Attention: Equity Syndicate Department, 330 Madison Avenue, 8th Floor, New York, NY 10017, by telephone at (212) 518-9544, or by email at GSEquityProspectusDelivery@guggenheimpartners.com.