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

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO SECTION 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of December, 2023

Commission File Number: 001-36815

Ascendis Pharma A/S
(Exact Name of Registrant as Specified in Its Charter)

Tuborg Boulevard 12
DK-2900 Hellerup
Denmark
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ☐

INCORPORATION BY REFERENCE

This report on Form 6-K shall be deemed to be incorporated by reference into the registration statements on Form S-8 (Registration Numbers 333-203040, 333-210810, 333-211512, 333-213412, 333-214843, 333-216883, 333-228576, 333-254101, 333-261550 and 333-270088) and Form F-3 (Registration Numbers 333-209336, 333-211511, 333-216882, 333-223134, 333-225284 and 333-256571) of Ascendis Pharma A/S (the "Company" or "Ascendis") (including any prospectuses forming a part of such registration statements) and to be a part thereof from the date on which this report is filed, to the extent not superseded by documents or reports subsequently filed or furnished.

On December 19, 2023, the Company announced positive topline results from foresiGHt, its Phase 3 randomized, parallel-arm, placebo-controlled (double-blind) and active-controlled (open-label) trial to compare the efficacy and safety of TransCon hGH (lonapegsomatropin) with placebo and daily hGH (human growth hormone, somatropin) in adults with growth hormone deficiency (GHD).

The foresiGHt Trial evaluated 259 adults with GHD aged 23 to 80 years old, randomized 1:1:1, titrated to receive a target fixed dose of TransCon hGH, placebo, or daily hGH based on age and oral estrogen intake with approximately equivalent hGH mg/week for TransCon hGH and daily hGH.

- TransCon hGH demonstrated superiority on its primary efficacy endpoint at Week 38:
    - Change from baseline in trunk percent fat as measured by dual x-ray absorptiometry (TransCon hGH -1.67% vs. placebo +0.37%, LS mean difference = -2.04%, $p < 0.0001$)
- TransCon hGH demonstrated superiority on its key secondary efficacy endpoints at Week 38:
    - Change from baseline in total body lean mass (TransCon hGH +1.60 kg vs placebo -0.10 kg, LS mean difference = 1.70 kg, $p < 0.0001$)
    - Change from baseline in trunk fat mass (TransCon hGH -0.48 kg vs placebo +0.22 kg, LS mean difference = -0.70 kg, $p = 0.0053$)
- Exploratory post-hoc analysis at Week 38 demonstrated comparable treatment effect of TransCon hGH and daily hGH on target tissues. For patients with IGF-1 SDS levels ≤ 1.75 at Week 38:
    - Change from baseline in trunk percent fat (TransCon hGH -2.42% vs. daily hGH -2.59%)
    - Change from baseline in total body lean mass (TransCon hGH +1.70 kg vs daily hGH +1.37 kg)
    - Change from baseline in trunk fat mass (TransCon hGH -0.90 kg vs daily hGH -0.94 kg)
- TransCon hGH was generally safe and well tolerated, with no discontinuations related to study drug and with comparable safety and tolerability to daily hGH.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Ascendis Pharma A/S

Date: December 19, 2023

By: /s/ Michael Wolff Jensen
Michael Wolff Jensen
Executive Vice President, Chief Legal Officer