
**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 April, 2020

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 333-228576, 333-203040, 333-210810, 333-211512, 333-213412, 333-214843 and 333-216883) and Form F-3 (Registration Numbers 333-209336, 333-211511, 333-216882, 333-223134 and 333-225284) of Ascendis Pharma A/S (the “Company”) (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such registration statements) and to be a part thereof from the date on which this report is filed, to the extent not superseded by documents or reports subsequently filed or furnished.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 April 19, 2020, the Company announced positive top-line results from the four-week fixed dose, blinded portion of PaTH Forward, a global phase 2 trial evaluating the safety, tolerability and efficacy of TransCon PTH in adult subjects with hypoparathyroidism (“HP”).

TransCon PTH is an investigational long-acting prodrug of parathyroid hormone (“PTH”) in development as a once-daily replacement therapy for adult hypoparathyroidism designed to replace PTH at physiologic levels for 24 hours each day and address both short-term symptoms and long-term complications of HP.

A total of 59 subjects were randomized in a blinded manner to receive fixed doses of TransCon PTH at 15, 18 or 21 mg/day or placebo for four weeks using a ready-to-use prefilled pen injector planned for commercial presentation. All doses of TransCon PTH were well-tolerated, and no serious or severe adverse events were shown at any point. No treatment-emergent adverse events (“TEAEs”) led to discontinuation of study drug, and the overall incidence of TEAEs was comparable between TransCon PTH and placebo. Additionally, there were no drop-outs during the four-week fixed dose period.

In the per protocol analysis (n=57), TransCon PTH eliminated standard of care (i.e. off active vitamin D and £ 500 mg per day of calcium supplements) in 100 percent of subjects in the highest dose arm (21 mg/day) and 82 percent of subjects across all dosage arms.

These results from the fixed dose portion of PaTH Forward demonstrated that TransCon PTH increased serum calcium levels, enabled discontinuation of active D and continuous calcium reduction of supplements over the four-week period. TransCon PTH reduced urinary calcium excretion (as measured by Fractional Excretion of Calcium or FECa) despite increased serum calcium, and resulted in sustained reductions in serum phosphate and calcium-phosphate product. At four weeks, the 21 mg/day arm and the combined TransCon PTH dosage arms showed a statistically significant response (p-value <0.05) in the primary composite endpoint compared to placebo in the per protocol analysis.

Fifty-eight subjects continue in the open-label extension portion of the trial, where they receive a customized maintenance dose of TransCon PTH (6 to 30 mg per day). The Company plans to report six-month data from the open-label extension portion of the trial during the third quarter of 2020.

The Company plans to engage with global regulatory authorities on next steps for development of TransCon PTH, and submit regulatory filings to initiate a global phase 3 trial in North America, Europe and Asia in the fourth quarter of 2020.

Forward-Looking Statements

This report contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this report regarding our future operations, plans and objectives of management are forward-looking statements. Examples of such statements include, but are not limited to, statements relating to (i) our plans to report six-month data from the open-label extension portion of the PaTH Forward Trial during the third quarter of 2020, (ii) our plans to engage with global regulatory authorities on next steps for development of TransCon PTH and (iii) our plans to submit regulatory filings to initiate a global phase 3 trial in North America, Europe and Asia in the fourth quarter of 2020. We may not actually achieve the plans, carry out the intentions or meet the expectations or projections disclosed in the forward-looking statements and you should not place undue reliance on these forward-looking statements. Actual results or events could differ materially from the plans, intentions, expectations and projections disclosed in the forward-looking statements. Various important factors could cause actual results or events to differ materially from the forward-looking statements that we make, including the following: unforeseen safety or efficacy results in our TransCon hGH, TransCon PTH and TransCon CNP or other development programs; unforeseen expenses related to the development and potential commercialization of TransCon hGH, TransCon PTH and TransCon CNP or other development programs, general and administrative expenses, other research and development expenses and our business generally; delays in the development of TransCon hGH, TransCon PTH and TransCon CNP or other development programs related to manufacturing, regulatory requirements, speed of patient recruitment or other unforeseen delays; dependence on third party manufacturers to supply study drug for planned clinical studies; our ability to obtain additional funding, if needed, to support our business activities and the effects on our business of the worldwide COVID-19 pandemic. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to our business in general, see our current and future reports filed with, or submitted to, the U.S. Securities and Exchange Commission (“SEC”), including our Annual Report on Form 20-F filed with the SEC on April 3, 2020. Forward-looking statements do not reflect the potential impact of any future in-licensing, collaborations, acquisitions, mergers, dispositions, joint ventures, or investments we may enter into or make. We do not assume any obligation to update any forward-looking statements, except as required by law.

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: April 20, 2020

By: /s/ Michael Wolff Jensen

Michael Wolff Jensen

Chairman and Senior Vice President, Chief Legal Officer