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File No. 054260-0005

January 16, 2015

VIA EDGAR AND HAND DELIVERY

United States Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549-6010

Attention: Jeffrey Riedler, Assistant Director

Johnny Gharib Bryan Pitko Vanessa Robertson Mark Brunhofer

Re: Ascendis Pharma A/S

Registration Statement on Form F-1 Filed on December 18, 2014 *Registration No.* 333-201050

Ladies and Gentleman:

On behalf of Ascendis Pharma A/S (the "Company"), we are hereby filing Amendment No. 1 ("Amendment No. 1") to the Company's Registration Statement on Form F-1 (the "Registration Statement"). The Company previously filed the above referenced Registration Statement with the Securities and Exchange Commission (the "Commission") on December 18, 2014. Amendment No. 1 has been revised to reflect the Company's responses to the comment letter to the Registration Statement received on January 6, 2015 from the staff of the Commission (the "Staff"). For your convenience, we are providing by overnight delivery a courtesy package that includes ten copies of Amendment No. 1, five of which have been marked to show changes from the Registration Statement, as well as a copy of this letter.

For ease of review, we have set forth below each of the numbered comments of your letter in bold type followed by the Company's responses thereto.

Summary Consolidated Financial Data, page 9

1. With regard to prior comment 3, please remove pro forma per share information for 2012 and the corresponding prior interim period as pro forma information is only allowed for the latest year and interim period.

Response: The Company respectfully acknowledges the Staff's comment and has revised page 9 of Amendment No. 1 to remove pro forma per share information for 2012 and the corresponding prior interim period.

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Description of Share Capital Our Warrants, page 159

2. Please explain to us why the exercise price of the 141,626 warrants issued on November 24, 2014 of €25.9100 is significantly less than the price per share of the preference D shares issued in November 2014 of €31.3645 since you disclose on page F-8 that the exercise price is fixed at the market price at the time of grant. Please tell us the fair value of the warrants granted in November 2014.

Response: As described in the section of the Registration Statement entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates—Share-Based Payment", historically, the price at which the Company's warrants could be exercised into ordinary shares was set on each grant date at the price per preference share for the most recent round of equity financing. As further described in our letter to the Staff on behalf of the Company dated January 9, 2015 (the "Share-Compensation Letter"), setting the exercise price at the applicable preference share issue price was done for business reasons and not to establish the fair value of the Company's ordinary shares. For the Company's most recent warrant issuance in November 2014, the Company granted warrants with an exercise price equal to the estimated fair value per ordinary share determined by the Company's board of directors and with a contemporaneous valuation from an independent third-party valuation firm rather than at the preference share issue price for the most recent round of equity financing. Given the superior rights, preferences and privileges of the preference D shares, including with respect to liquidation seniority and voting rights, as compared to the Company's ordinary shares, the Company does not believe that the value of its ordinary shares was equivalent to the issue price of the preference D shares.

As described in greater detail in the Share-Compensation Letter, the Company's board of directors determined that the estimated value per share of the Company's ordinary shares as of the grant date of the warrants granted in November 2014 was €25.91. As the Company has not yet finalized its financial statements for the fourth quarter of the fiscal year ended December 31, 2014, the Company has not finally determined the fair value of the warrants granted in November 2014; however, the Company expects the fair value of such warrants to be approximately €14.05 per warrant (before giving effect to the Company's three-for-one bonus share issuance completed on January 13, 2015), or an aggregate of €2.0 million for the total grant of 141,626 warrants (before giving effect to the Company's three-for-one bonus share issuance completed on January 13, 2015).

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We hope the foregoing answers are responsive to your comments. Please do not hesitate to contact me by telephone at (650) 463-3014 or by fax at (650) 463-2600 with any questions or comments regarding this correspondence.

Very truly yours,

/s/ Brian J. Cuneo

Brian J. Cuneo of LATHAM & WATKINS LLP

C: Jan Møller Mikkelsen, Ascendis Pharma A/S Thomas P. Soloway, Ascendis Pharma A/S Michael Wolff Jensen, Ascendis Pharma A/S Alan C. Mendelson, Latham & Watkins LLP Mark V. Roeder, Latham & Watkins LLP Divakar Gupta, Cooley LLP