

August 29, 2013

**Via EDGAR Submission**

Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, NE  
Washington, DC 20549  
Attention: Jeffrey P. Riedler

Re: Ophthotech Corporation  
Registration Statement on Form S-1  
Filed August 15, 2013  
File No. 333-190643

Ladies and Gentlemen:

On behalf of Ophthotech Corporation (the "Company"), submitted herewith for filing is Amendment No. 1 ("Amendment No. 1") to the above referenced Registration Statement on Form S-1 (the "Registration Statement") relating to the registration under the Securities Act of 1933, as amended, of common stock of the Company.

Amendment No. 1 is being filed in part to respond to the comments of the staff (the "Staff") of the Securities and Exchange Commission contained in its letter dated August 27, 2013 (the "Comment Letter"), relating to the Registration Statement.

Set forth below are the Company's responses to the Staff's comments. The responses set forth below are based upon information provided to Wilmer Cutler Pickering Hale and Dorr LLP by the Company. For convenience, the responses are keyed to the numbering of the comments and the headings used in the Comment Letter.

On behalf of the Company, we advise you as follows:

**FORM S-1**

**Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Significant Judgments and Estimates Share-Based Compensation Fair Market Value Estimates, page 64**

**General**

1. *Please revise your disclosure provided in response to comment 17 to separately disclose the intrinsic value of outstanding vested options from outstanding unvested options. In addition, given the significant option grants in July and August, please also disclose this information for those options outstanding at the date you request effectiveness.*

**Response:** In response to the Staff's comment, the Company has revised the disclosure on page 65 of the prospectus forming part of Amendment No. 1 (the "Prospectus").

#### **Notes to Financial Statements**

##### **5. Financing Activities, page F-10**

2. *Please refer to your response to comment 23. Please represent to us that you will mark these warrants to fair value immediately prior to their becoming warrants to purchase common stock. To the extent material, please also represent that you will disclose the anticipated charge to be recorded upon the completion of your offering in MD&A as a known event or uncertainty and in your capitalization table.*

**Response:** The Company advises the Staff that that it will mark these warrants to fair value immediately prior to their becoming warrants to purchase common stock. In addition, in response to the Staff's comment, the Company has revised the disclosure on page 61 in the Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") section of the Prospectus. The Company further advises the Staff that the revaluation of the warrants is currently contemplated to be included in the pro forma column in the Capitalization section of the Prospectus. Once the Company discloses an estimated offering price range in a subsequent amendment to the Registration Statement, it will further supplement these disclosures in the MD&A and Capitalization sections of the Prospectus.

##### **6. Product and Technology Agreements, page F-13**

3. *Please refer to your response to comment 25. We note your increased disclosures for the Archemix and Nektar Therapeutics agreements. Please expand your disclosures to include the term and termination provisions for the agreement with OSI (Eyeteck) similar to your disclosures on page 106.*

**Response:** In response to the Staff's comment, the Company has revised the disclosure on page F-13 of the Prospectus to clarify references to the agreement with OSI (Eyeteck).

**Transferred Technology and Assumed Agreements, page F-13**

4. *Please explain the difference between the \$1,000,000 disclosed as the amount the company has paid the supplier which was charged to research and development expense during the year ended December 31, 2007 and the \$750,000 disclosed on page 74 for the amount the company has paid from inception through December 31, 2012.*

**Response:** In response to the Staff's comment, the Company has revised the disclosure on pages F-13 and F-14 of the Prospectus to clarify the amounts and timing of payments made by both the Company and OSI (Eyetechnology) to the supplier. The Company further advises the Staff that this updated disclosure is consistent with corresponding disclosure on page 109 of the Prospectus.

**Notes to Unaudited Financial Statements****8. Subsequent Events, page F-40**

5. *Please tell us your consideration of whether any beneficial conversion feature will be recorded in connection with your recent convertible stock issuance in August of 2013 and provide us an analysis of your accounting.*

**Response:** The Company reviewed the relevant accounting guidance, specifically ASC 470-20-20, to determine if a beneficial conversion feature should be recorded in connection with the initial issuance of the Company's Series C preferred stock in May 2013 and the subsequent issuance of additional shares of Series C preferred stock in August 2013.

Based on the Company's review of ASC 470-20-20, the Company has determined that, at the time of the initial closing of the Series C financing on May 23, 2013, there was a firm commitment from the Series C investors with respect to the significant terms of the financing, including the quantity of shares to be issued, the fixed price of the shares and the timing of the transaction. As such, the Company's measurement of any beneficial conversion feature occurred at that time of the initial closing. Based on a recent valuation of approximately \$1.70 per share for the Company's common stock prior to the date of the initial closing of the Series C financing, as determined by an independent third party appraiser, as well as the fact that the Series C shares issued had a conversion price of \$2.50 per share (implying a one-to-one conversion into shares of common stock), the Company determined that there is no beneficial conversion feature associated with the issuance of its Series C preferred stock.

Supplementally, the Company concluded that the Series C equity documents included a disincentive feature for nonperformance that was sufficiently large to make investor performance at subsequent closings probable. Specifically if the initial Series C investors did not participate in the subsequent Series C closings, a pay-to-play provision in the Company's certificate of incorporation provides that all prior investments in the Company's Series A preferred stock, Series B preferred stock and Series C preferred stock, of which each of the Series C investors owns a substantial amount of shares, would immediately convert into common stock. The automatic conversion feature also included a combination provision specific to the shares of Series C preferred stock issued at prior closings, pursuant to which the shares of Series C preferred stock previously issued to an investor who failed to participate in a subsequent Series C closing would be combined into converted shares of common stock at a ratio of ten-to-one, resulting in a significant economic penalty to Series C investors that did not participate in the subsequent Series C closings. These penalties are in addition to legal action that the Company could take against non-performing investors, as per the terms of the Series C preferred stock purchase agreement.

If you have any further questions or comments, or if you require any additional information, please contact the undersigned by telephone at (212) 937-7206, facsimile at (212) 230-8888 or email at [brian.johnson@wilmerhale.com](mailto:brian.johnson@wilmerhale.com). Thank you for your assistance.

Very truly yours,

/s/ Brian A. Johnson

Brian A. Johnson

cc: David R. Guyer, MD