UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

OPHTHOTECH CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

Delaware 20-8185347

(State or Other Jurisdiction of Incorporation or Organization)

(I.R.S. Employer Identification No.)

One Penn Plaza, 19th Floor New York, New York

10119

(Address of Principal Executive Offices)

(Zip Code)

2013 Stock Incentive Plan

(Full Title of the Plan)

Glenn P. Sblendorio President and Chief Executive Officer Ophthotech Corporation One Penn Plaza, 19th Floor New York, New York 10119

(Name and Address of Agent for Service)

(212) 845-8200

(Telephone Number, Including Area Code, of Agent For Service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b of the Exchange Act.

Large accelerated filer x Accelerated filer o

Non-accelerated filer o Smaller reporting company o

(Do not check if a smaller reporting company) Emerging growth company o

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. o

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share	1,429,394 shares	\$ 2.39(2)	\$ 3,416,252(2)	\$ 396

⁽¹⁾ In accordance with Rule 416 under the Securities Act of 1933, as amended, this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.

²⁾ Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(h) of the Securities Act of 1933, as amended. The price per share and aggregate offering price are calculated on the basis of \$2.39, the average of the high and low sale prices of the Registrant's Common Stock as reported on The NASDAQ Global Select Market on July 31, 2017, in accordance with Rule 457(c) under the Securities Act of 1933, as amended.

EXPLANATORY NOTE

This Registration Statement on Form S-8, relating to the 2013 Stock Incentive Plan of Ophthotech Corporation (the "Registrant"), is being filed for the purpose of registering additional securities of the same class as other securities for which a Registration Statement on Form S-8 has previously been filed and is effective. Accordingly, this Registration Statement hereby incorporates by reference the contents of (i) the Registration Statement on Form S-8, File No. 333-191767, filed with the Securities and Exchange Commission on October 16, 2013 by the Registrant, relating to the Registrant's Amended and Restated 2007 Stock Incentive Plan, as amended, and 2013 Stock Incentive Plan; (ii) the Registration Statement on Form S-8, File No. 333-193694, filed with the Securities and Exchange Commission on January 31, 2014 by the Registrant, relating to the Registrant's 2013 Stock Incentive Plan; (iii) the Registration Statement on Form S-8, File No. 333-202438, filed with the Securities and Exchange Commission on March 2, 2015 by the Registrant, relating to the Registrant's 2013 Stock Incentive Plan and certain inducement grants; and (iv) the Registrant's 2013 Stock Incentive Plan and certain inducement grants, in each case except for Item 8, Exhibits, with respect to which the Exhibit Index immediately preceding the exhibits attached hereto is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on this 3rd day of August, 2017.

OPHTHOTECH CORPORATION

By: /s/ Glenn P. Sblendorio

Glenn P. Sblendorio

President and Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Ophthotech Corporation, hereby severally constitute and appoint Glenn P. Sblendorio, David F. Carroll and Barbara A. Wood, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the Registration Statement on Form S-8 filed herewith and any and all subsequent amendments to said Registration Statement, and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable Ophthotech Corporation to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said Registration Statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Glenn P. Sblendorio	President, Chief Executive Officer and Director (principal executive officer)	August 3, 2017
Glenn P. Sblendorio		
/s/ David F. Carroll	Senior Vice President, Chief Financial Officer and Treasurer (principal financial and accounting officer)	August 3, 2017
David F. Carroll		
/s/ David R. Guyer	Executive Chairman of the Board of Directors	August 3, 2017
David R. Guyer, M.D.		
	Director	
Axel Bolte		
/s/ Thomas Dyrberg Thomas Dyrberg, M.D., D.M.Sc.	Director	August 3, 2017
/s/ David E. Redlick	Director	August 3, 2017
David E. Redlick		
/s/ Michael Ross Michael Ross, Ph.D.	Director	August 3, 2017

INDEX TO EXHIBITS

<u>Number</u>	Description
4.1*	Restated Certificate of Incorporation of the Registrant
4.2*	Amended and Restated By-Laws of the Registrant
5.1	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel to the Registrant
23.1	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)
23.2	Consent of Ernst & Young LLP
24.1	Power of attorney (included on the signature pages of this registration statement)
99.1**	2013 Stock Incentive Plan
99.2***	Amendment No. 1 to 2013 Stock Incentive Plan

^{*} Previously filed with the Securities and Exchange Commission as an Exhibit to the Registrant's Registration Statement on Form S-1 (File No. 333-190643) on September 9, 2013 and incorporated herein by reference.

^{**} Previously filed with the Securities and Exchange Commission as an Exhibit to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2014 and incorporated herein by reference.

^{***} Previously filed with the Securities and Exchange Commission as an Exhibit to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015 and incorporated herein by reference.

WILMERHALE

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August 3, 2017

Ophthotech Corporation One Penn Plaza, 19th Floor New York, NY 10119

Re: Ophthotech Corporation

Registration Statement on Form S-8

2013 Stock Incentive Plan

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the "**Registration Statement**") to be filed with the Securities and Exchange Commission (the "**Commission**") under the Securities Act of 1933, as amended (the "**Securities Act**"), relating to an aggregate of 1,429,394 shares of common stock, \$0.001 par value per share (the "**Shares**"), of Ophthotech Corporation, a Delaware corporation (the "**Company**"), issuable under the Company's 2013 Stock Incentive Plan (the "**Plan**").

We have examined the Certificate of Incorporation and Bylaws of the Company, each as amended and/or restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the directors and stockholders of the Company, the Registration Statement and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, photostatic or other copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plan, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of the State of New York, the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Wilmer Cutler Pickering Hale and Dorr LLP, 7 World Trade Center, 250 Greenwich Street, New York, New York 10007

Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Oxford Palo Alto Washington

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Ophthotech Corporation

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Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Plan, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

WILMER CUTLER PICKERING HALE AND DORR LLP

By: /s/ Brian A. Johnson
Brian A. Johnson, a Partner

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2013 Stock Incentive Plan of Ophthotech Corporation of our reports dated February 28, 2017, with respect to the financial statements of Ophthotech Corporation and the effectiveness of internal control over financial reporting of Ophthotech Corporation included in its Annual Report (Form 10-K) for the year ended December 31, 2016, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP MetroPark, New Jersey August 3, 2017