UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

VERTEX PHARMACEUTICALS INCORPORATED

(Exact name of registrant as specified in its charter)

Massachusetts

(State or other jurisdiction of incorporation or organization)

04-3039129

(I.R.S. Employer Identification Number)

50 Northern Avenue Boston, Massachusetts 02210 (617) 341-6100 (Address of Principal Executive Offices)

2013 STOCK AND OPTION PLAN

(Full Title of Plan)

Jeffrey M. Leiden Chief Executive Officer Vertex Pharmaceuticals Incorporated 50 Northern Avenue Boston, Massachusetts 02210 (617) 341-6100

(Name, address, and 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 definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer X

Accelerated filer O

Non-accelerated filer O

Smaller reporting company O

(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Amor Securities to be Registered be Regi		Proposed Maximum Offering Price Per Share(2)		Proposed Maximum Aggregate Offering Price		Amount of Registration Fee	
Common Stock, \$0.01 par value	9,500,000	\$	96.77	\$	919,315,000	\$ 118,408	

The number of shares of common stock, par value \$.01 per share, stated above consists of the aggregate number of additional shares that may be issued under the Vertex Pharmaceuticals Incorporated 2013 Stock and Option Plan pursuant to the 2014 amendment of the plan. The maximum number of shares

that may be issued under the plan is subject to adjustment in accordance with certain anti-dilution and other provisions of the plan. Accordingly, pursuant to Rule 416 under the Securities Act of 1933, as amended, this Registration Statement covers, in addition to the number of shares stated above, an indeterminate number of shares that may be subject to grant or otherwise issuable after the operation of any such anti-dilution or other provisions.

(2) Estimated solely for purposes of determining the registration fee pursuant to Rule 457(c) and (h) under the Securities Act of 1933, as amended, based on the average of the high and low sale prices of the Registrant's common stock as reported by The NASDAQ Global Select Market on July 10, 2014.

Statement of Incorporation by Reference

This Registration Statement on Form S-8 is being filed to register the offer and sale of an additional 9,500,000 shares of Common Stock, \$0.01 par value per share (the "Common Stock"), of Vertex Pharmaceuticals Incorporated (the "Registrant") to be issued under the 2013 Stock and Option Plan (the "2013 Plan") of the Registrant. In accordance with General Instruction E to Form S-8, this Registration Statement incorporates by reference the contents of the Registration Statement on Form S-8 filed by the Registrant on May 21, 2013 (File No. 333-188737), relating to the Registrant's 2013 Plan.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 Boston, Massachusetts on July 16, 2014.

VERTEX PHARMACEUTICALS INCORPORATED				
By:	/s/ JEFFREY M. LEIDEN			
	Jeffrey M. Leiden			
	Chief Executive Officer and President			

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Jeffrey M. Leiden, Ian F. Smith and Kenneth L. Horton and each of them singly, his/her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them singly, for him/her and in his/her name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8 of Vertex Pharmaceuticals Incorporated, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting to the attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in or about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that the attorneys-in-fact and agents or any of each of them or their substitute may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, 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 Boston, Massachusetts on July 16, 2014.

	Signature	Title	Date
By:	/s/ JEFFREY M. LEIDEN	Chairman, Chief Executive Officer and President (principal executive officer)	July 16, 2014
	Jeffrey M. Leiden		
Ву:	/s/ IAN F. SMITH	Executive Vice President and Chief Financial Officer (principal financial officer)	July 16, 2014
	Ian F. Smith	,	
Ву:	/s/ PAUL M. SILVA	Senior Vice President and Corporate Controller (principal accounting officer)	July 16, 2014
	Paul M. Silva		
By:	/s/ DAVID M. ALTSHULER	Director	July 16, 2014
	David M. Altshuler		
By:	/s/ JOSHUA S. BOGER	Director	July 16, 2014
	Joshua S. Boger		
By:	/s/ TERRENCE C. KEARNEY Terrence C. Kearney	Director	July 16, 2014
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By:	/s/ YUCHUN LEE Yuchun Lee	Director	July 16, 2014
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By:	/s/ MARGARET G. MCGLYNN Margaret G. McGlynn	Director	July 16, 2014
D ₁₇ ,	/s/ WAYNE J. RILEY	Director	July 16, 2014
Ву:	Wayne J. Riley		July 10, 2014
Ву:	/s/ BRUCE I. SACHS	Director	July 16, 2014
	Bruce I. Sachs	_	July 10, 2 011
Ву:	/s/ ELAINE S. ULLIAN	Director	July 16, 2014
	Elaine S. Ullian	_	J -,
By:	/s/ WILLIAM D. YOUNG	Director	July 16, 2014

William D. Young

VERTEX PHARMACEUTICALS INCORPORATED INDEX TO EXHIBITS FILED WITH FORM S-8 REGISTRATION STATEMENT

Exhibit Number	Exhibit Description	Filed with this Registration Statement	Incorporated by Reference herein from—Form or Schedule	Filing Date/ Period Covered	SEC File/ Reg. Number
4.1	Restated Articles of Organization of Vertex Pharmaceuticals Incorporated, as amended.		10-Q (Exhibit 3.1)	August 11, 2008	000-19319
4.2	By-laws of Vertex, as amended and restated as of February 5, 2013.		8-K (Exhibit 3.1)	February 11, 2013	000-19319
4.3	Specimen stock certificate.		S-1 (Exhibit 4.1)	July 18, 1991	33-40966
5.1	Opinion of counsel as to the legality of the shares being registered.	X			
23.1	Consent of Ernst & Young LLP	X			
23.2	Consent of counsel (included as part of Exhibit 5.1).	X			
24.1	Power of Attorney to file future amendments (set forth on signature page of this Registration Statement).	X			
99.1	Vertex Pharmaceuticals Incorporated 2013 Stock and Option Plan.		DEF-14A (Appendix A)	March 28, 2014	000-19319

Vertex Pharmaceuticals Incorporated 50 Northern Avenue Boston, Massachusetts 02210

Re: Vertex Pharmaceuticals Incorporated 2013 Stock and Option Plan

Ladies and Gentlemen:

I have assisted in the preparation of the 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 9,500,000 shares of common stock, \$0.01 par value per share (the "Shares"), of Vertex Pharmaceuticals Incorporated, a Massachusetts corporation (the "Company"), issuable under the Company's 2013 Stock and Option Plan (the "Plan").

I have examined the Articles of Organization and By-Laws of the Company, each as amended and restated to date, and originals, or copies certified to my satisfaction, of all pertinent records of the meetings of the directors and shareholders of the Company, the Registration Statement and such other documents relating to the Company as I have deemed material for the purposes of this opinion.

In my examination of the foregoing documents, I have assumed the genuineness of all signatures, the authenticity of all documents submitted to me as originals, the conformity to original documents of all documents submitted to me 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.

I express no opinion herein as to the laws of any state or jurisdiction other than the state laws of The Commonwealth of Massachusetts 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.

Please note I am opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. I assume no obligation to revise or supplement this opinion should the present laws, or the interpretation thereof, be changed in respect of any circumstances or events that occur subsequent to the date hereof.

Based on the foregoing, I am 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.

I 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, I do not hereby admit that I am 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,

/s/ Michael L. LaCascia

Michael L. LaCascia

Vice President and Deputy General Counsel

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-8 pertaining to the 2013 Stock and Option Plan of Vertex Pharmaceuticals Incorporated of our reports dated February 11, 2014, with respect to the consolidated financial statements of Vertex Pharmaceuticals Incorporated and the effectiveness of internal control over financial reporting of Vertex Pharmaceuticals Incorporated included in its Annual Report (Form 10-K) for the year ended December 31, 2013, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts July 16, 2014