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

(Address of Principal Executive Offices)

EMPLOYEE STOCK PURCHASE 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, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer X Accelerated filer O Non-accelerated filer O Smaller reporting company O

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. 0

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock, \$0.01 par value	2,000,000	\$166.39	\$332,780,000	\$40,332.94

- Consists of 2,000,000 additional shares of common stock, par value \$0.01 per share, that may be issued under the Vertex Pharmaceuticals Incorporated Employee Stock Purchase Plan (the "ESPP") pursuant to an amendment and restatement to the ESPP that became effective June 5, 2019. 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 anti-dilution provisions, stock splits, or other similar transactions.
- (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 29, 2019.

Statement of Incorporation by Reference

This Registration Statement on Form S-8 is being filed to register the offer and sale of an additional 2,000,000 shares of Common Stock, \$0.01 par value per share (the "Common Stock") of Vertex Pharmaceuticals Incorporated (the "Registrant") to be issued under the Employee Stock Purchase Plan (the "ESPP") 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 November 6, 2012 (File No. 333-184784), relating to the Registrant's ESPP, except for Item 8, Exhibits, which has been updated and included herein.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

Exhibit Number	Exhibit Description	Filed with this Registration Statement	Incorporated by Reference herein from—Form or Schedule	Filing Date	SEC File/ Reg. Number
4.1	Restated Articles of Organization of Vertex Pharmaceuticals Incorporated, as amended.		10-Q (Exhibit 3.1)	July 26, 2018	000-19319
4.2	Amended and Restated By-laws of Vertex Pharmaceuticals Incorporated.		10-Q (Exhibit 3.2)	July 26, 2018	000-19319
4.3	Specimen stock certificate.		10-K (Exhibit 4.1)	February 15, 2018	000-19319
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	<u>Vertex Pharmaceuticals Incorporated Employee</u> <u>Stock Purchase Plan.</u>		DEF-14A (Appendix B)	April 26, 2019	000-19319

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 August 1, 2019.

VERTE	ATTEMOMICE TIGHES INCOM CIVILED
By:	/s/ Jeffrey M. Leiden
	Jeffrey M. Leiden
	Chief Executive Officer and President

VEDTEV DUADMACEUTICAL CINCODDODATED

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Jeffrey M. Leiden, Michael J. Parini, Omar White, and Sabrina Yohai 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, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

	Signature	Title	Date
Ву:	/s/ Jeffrey M. Leiden	Chairman, Chief Executive Officer and President (Principal Executive Officer)	August 1, 2019
	Jeffrey M. Leiden		

	Jeffrey M. Leiden	,	
By:	/s/ Charles F. Wagner, Jr.	Executive Vice President and Chief Financial Officer (Principal	August 1, 2019
	Charles F. Wagner, Jr.	Financial Officer)	
Ву:	/s/ Paul M. Silva	Senior Vice President and Corporate Controller (Principal	August 1, 2019
	Paul M. Silva	— Accounting Officer)	
By:	/s/ Sangeeta N. Bhatia	Director	August 1, 2019
	Sangeeta N. Bhatia		
By:	/s/ Lloyd Carney	Director	August 1, 2019
	Lloyd Carney		
By:	/s/ Alan Garber	Director	August 1, 2019
_	Alan Garber		-
By:	/s/ Terrence C. Kearney	Director	August 1, 2019
_	Terrence C. Kearney	<u> </u>	
D	(177.1	Division	
Ву:	/s/ Yuchun Lee Yuchun Lee	Director	August 1, 2019
_			
Ву:	/s/ Margaret G. McGlynn Margaret G. McGlynn	Director	August 1, 2019
	Maigalet G. McGryllii		
By:	/s/ Bruce I. Sachs	Director	August 1, 2019
	Bruce I. Sachs		
By:	/s/ William D. Young	Director	August 1, 2019
_	T.7'11' D. T7		5

William D. Young

August 1, 2019

Vertex Pharmaceuticals Incorporated 50 Northern Avenue Boston, Massachusetts 02210

Re: Vertex Pharmaceuticals Incorporated Employee Stock Purchase 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 2,000,000 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 Employee Stock Purchase 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. 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/ Omar White Omar White Vice President, Corporate Legal Vertex Pharmaceuticals Incorporated

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Employee Stock Purchase Plan (the "ESPP") of Vertex Pharmaceuticals Incorporated of our reports dated February 13, 2019, 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, 2018, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts August 1, 2019