

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

**FORM S-8
REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933**

INOTEK PHARMACEUTICALS CORPORATION

(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or Other Jurisdiction
of Incorporation or Organization)

04-3475813
(I.R.S. Employer Identification No.)

**Inotek Pharmaceuticals Corporation
91 Hartwell Avenue
Lexington, MA 02421
(781) 676-2100**
(Address of Principal Executive Offices)

**Inotek Pharmaceuticals Corporation Amended and Restated 2014 Stock Option and Incentive Plan
Inotek Pharmaceuticals Corporation Amended and Restated 2014 Employee Stock Purchase Plan**
(Full Title of the Plans)

**David P. Southwell
President and Chief Executive Officer
91 Hartwell Avenue
Lexington, MA 02421
(781) 676-2100**
(Name and Address of Agent For Service)

Copy to:
**Mitchell S. Bloom
Edwin M. O'Connor
Goodwin Procter LLP
Exchange Place
53 State Street
Boston, Massachusetts 02109
(617) 570-1000**

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-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

<u>Title of Securities to be Registered</u>	<u>Amount to be Registered⁽¹⁾</u>	<u>Proposed Maximum Offering Price per Share⁽³⁾</u>	<u>Proposed Maximum Aggregate Offering Price</u>	<u>Amount of Registration Fee</u>
Common Stock, \$0.01 par value per share	1,056,935 shares ⁽²⁾	\$ 6.93	\$ 7,324,559.55	\$ 737.59
Common Stock, \$0.01 par value per share	117,100 shares ⁽⁴⁾	\$ 6.93	\$ 811,503.00	\$ 81.72
Total	1,174,035 shares			\$ 819.31

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of common stock which become issuable under the Amended and Restated 2014 Stock Option and Incentive Plan (the "Option Plan") or the Amended and Restated 2014 Employee Stock Purchase Plan (the "ESPP") by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without the receipt of consideration which results in an increase in the number of our outstanding shares of common stock. Pursuant to Rule 416(c) under the Securities Act, this Registration Statement shall also cover an indeterminate amount of interests to be offered or sold pursuant to the employee benefit plans described herein.
- (2) Represents shares of common stock that were automatically added to the shares authorized for future issuance under the Option Plan .
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457 (c) and (h) of the Securities Act, and based on \$6.93, the average of the high and low prices reported in the consolidated reporting system as of a specified date within 5 business days prior to the date of filing the registration statement.
- (4) Represents shares of common stock that were automatically added to the shares authorized for future issuance under the ESPP.

REGISTRATION OF ADDITIONAL SECURITIES PURSUANT TO GENERAL INSTRUCTION E

Pursuant to General Instruction E to Form S-8, this Registration Statement is being filed for the purpose of registering an additional (i) 1,056,935 shares of the Registrant's common stock to be issued pursuant to the Registrant's Amended and Restated 2014 Stock Option and Incentive Plan and (ii) 117,100 shares of the Registrant's common stock to be issued pursuant to the Registrant's Amended and Restated 2014 Employee Stock Purchase Plan, which are the same class as those securities previously registered on effective Form S-8 filed with the Securities and Exchange Commission on May 28, 2015 (File No. 333-204501), and the contents of that Registration Statement are incorporated by reference into this Registration Statement.

Part II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

See the Exhibit Index on the page immediately preceding the exhibits for a list of exhibits filed as part of this registration statement, which Exhibit Index is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Act, 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 Lexington, Commonwealth of Massachusetts, on the 29 day of June 2016.

INOTEK PHARMACEUTICALS CORPORATION

By: /s/ David P. Southwell

David P. Southwell

President, Chief Executive Officer and Director

POWER OF ATTORNEY AND SIGNATURES

KNOW ALL BY THESE PRESENT, that each individual whose signature appears below hereby constitutes and appoints each of David P. Southwell and Dale Ritter as such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for such person in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8, and to file the same, with all exhibits thereto, and all documents in connection therewith, with the SEC granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following person in the capacities and on the date indicated below.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ David P. Southwell</u> DAVID P. SOUTHWELL	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	June 29, 2016
<u>/s/ Dale Ritter</u> Dale Ritter	Vice President–Finance <i>(Principal Financial and Accounting Officer)</i>	June 29, 2016
<u>/s/ Carsten Boess</u> Carsten Boess	Director	June 29, 2016
<u>/s/ J. Martin Carroll</u> J. Martin Carroll	Director	June 29, 2016
<u>/s/ Paul G. Howes</u> Paul G. Howes	Director	June 29, 2016
<u>/s/ Gary M. Phillips, M.D.</u> Gary M. Phillips, M.D.	Director	June 29, 2016
<u>/s/ Richard N. Spivey, PharmD, Ph.D.</u> Richard N. Spivey, PharmD, Ph.D.	Director	June 29, 2016

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
4.1	Form of Common Stock Certificate of Inotek Pharmaceuticals Corporation (Incorporated by reference to Exhibit 4.1 to the registrant's Annual Report on Form 10-K (File No. 001-36829)).
4.2	Third Amended and Restated Investor Rights Agreement, dated as of June 9, 2010, by and among the Registrant and each of the parties listed on Schedule A thereto (Incorporated by reference to Exhibit 4.2 to the registrant's Registration Statement on Form S-1, as amended (File No. 333-199859)).
4.3	Indenture between Inotek Pharmaceuticals Corporation, and Wilmington Trust, National Association, as the trustee, relating to the 5.0% Convertible Senior Notes due 2020 (Incorporated by reference to Exhibit 4.1 to the registrant's Form 8-K filed with the SEC on February 26, 2015 (File No. 001-36829)).
5.1*	Opinion of Goodwin Procter LLP.
23.1*	Consent of RSM US LLP, Independent Registered Public Accounting Firm.
23.2*	Consent of Goodwin Procter LLP (included in Exhibit 5.1).
24.1*	Power of attorney (included on signature page).

* Filed herewith.

June 29, 2016

Inotek Pharmaceuticals Corporation
91 Hartwell Avenue
Lexington, MA 02421

Re: Securities Being Registered under Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-8 (the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on or about the date hereof relating to an aggregate of 1,174,035 shares (the "Shares") of Common Stock, \$0.01 par value per share, of Inotek Pharmaceuticals Corporation, a Delaware corporation (the "Company"), that may be issued pursuant to the Company's Amended and Restated 2014 Stock Option and Incentive Plan and Amended and Restated 2014 Employee Stock Purchase Plan (collectively, the "Plans").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinion set forth below, on certificates and other inquiries of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law (which includes reported judicial decisions interpreting the Delaware General Corporation Law).

For purposes of the opinion set forth below, we have assumed that a sufficient number of authorized but unissued shares of the Company's Common Stock will be available for issuance when the Shares are issued.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, upon issuance and delivery against payment therefor in accordance with the terms of the Plans, will be validly issued, fully paid and nonassessable.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement. In giving our consent, we do not 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 thereunder.

Very truly yours,

/s/ GOODWIN PROCTER LLP

GOODWIN PROCTER LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement on Form S-8 of Inotek Pharmaceuticals Corporation of our report dated March 23, 2016, relating to our audit of the consolidated financial statements, which appears in the Annual Report on Form 10-K of Inotek Pharmaceuticals Corporation for the year ended December 31, 2015.

/s/ RSM US LLP

Boston, Massachusetts
June 29, 2016