

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

FORM S-1
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)

1834
(Primary Standard Industrial
Classification Code Number)

04-3475813
(I.R.S. Employer Identification Number)

131 Hartwell Avenue, Suite 105
Lexington, MA 02421
(781) 676-2100

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

David P. Southwell
President and Chief Executive Officer
Inotek Pharmaceuticals Corporation
131 Hartwell Avenue, Suite 105
Lexington, MA 02421
(781) 676-2100

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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

Babak Yaghmaie
Divakar Gupta
Joshua Kaufman
Cooley LLP
1114 Avenue of the Americas
New York, NY 10036
(212) 479-6000

Approximate date of commencement of proposed sale to public: As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. File No. 333-206027

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee(2)
Common Stock, \$0.01 par value per share	1,035,000	\$12.75	\$13,196,250	\$1,533.41

- (1) Represents only the additional number of shares being registered and includes shares of common stock that may be purchased by the underwriters to cover over-allotments, if any. Does not include the securities that the Registrant previously registered on the Registration Statement on Form S-1 (File No. 333-206027).
- (2) The registration fee is calculated in accordance with Rule 457(a) under the Securities Act of 1933, as amended, based on the proposed maximum aggregate offering price. The registrant previously registered securities at an aggregate offering price not to exceed \$66,705,750 on a Registration Statement on Form S-1 (File No. 333-206027), which was declared effective by the Securities and Exchange Commission on August 12, 2015. In accordance with Rule 462(b) under the Securities Act, an additional amount of securities having a proposed maximum aggregate offering price of \$13,196,250 is hereby registered, which includes shares issuable upon the exercise of the underwriters' over-allotment option.

This registration statement shall become effective upon filing with the Commission in accordance with Rule 462(b) of the Securities Act of 1933, as amended.

EXPLANATORY NOTE AND INCORPORATION BY REFERENCE

Pursuant to Rule 462(b) under the Securities Act of 1933, as amended, Inotek Pharmaceuticals Corporation is filing this registration statement with the Securities and Exchange Commission, or SEC. This registration statement relates to the public offering of securities contemplated by the registration statement on Form S-1 (File No. 333-206027), which we originally filed on July 31, 2015, as amended, or the Registration Statement, and which the SEC declared effective on August 12, 2015.

We are filing this registration statement for the sole purpose of increasing by 1,035,000 shares the number of shares of our common stock to be registered for issuance and sale. The additional securities that are being registered for issuance and sale are in an amount and at a price that together represent no more than 20% of the maximum aggregate offering price set forth in the Calculation of Registration Fee table contained in the Registration Statement. The information set forth in the Registration Statement is incorporated by reference in this filing.

The required opinions and consents are listed on the exhibit index and filed with this filing.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Lexington, Commonwealth of Massachusetts, on the 12th day of August 2015.

Inotek Pharmaceuticals Corporation

By: /s/ David P. Southwell

David P. Southwell

President, Chief Executive Officer and Director

Pursuant to the requirements of the Securities Act, this Registration Statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</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>	August 12, 2015
<u>*</u> Dale Ritter	Vice President—Finance <i>(Principal Financial and Accounting Officer)</i>	August 12, 2015
<u>*</u> A.N. “Jerry” Karabelas, Ph.D.	Director	August 12, 2015
<u>*</u> Ittai Harel	Director	August 12, 2015
<u>*</u> Paul G. Howes	Director	August 12, 2015
<u>*</u> Richard N. Spivey	Director	August 12, 2015
<u>*</u> Isai Peimer	Director	August 12, 2015
<u>*</u> Martin Vogelbaum	Director	August 12, 2015

*By: /s/ David P. Southwell

David P. Southwell

Attorney-in-Fact

Exhibit index

<u>Exhibit number</u>	<u>Description of exhibit</u>
5.1	Opinion of Goodwin Procter LLP
23.1	Consent of McGladrey LLP, Independent Registered Public Accounting Firm
23.2	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
24.1	Power of Attorney (incorporated by reference to Registration Statement on Form S-1 (File No. 333-206027) filed July 31, 2015, as amended)

Inotek Pharmaceuticals Corporation
131 Hartwell Avenue, Suite 105
Lexington, MA 02421

Re: Securities Registered under Registration Statement on Form S-1

Ladies and Gentlemen:

We have acted as counsel to you in connection with your filing of (i) a Registration Statement on Form S-1 (File No. 333-206027) (as amended or supplemented, the "Initial Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act") and (ii) a second Registration Statement on Form S-1 pursuant to Rule 462(b) promulgated under the Securities Act (the "462(b) Registration Statement", and together with the Initial Registration Statement, the "Registration Statement"). This opinion letter is furnished to you in connection with your filing of the 462(b) Registration Statement, relating to the registration of the offering by Inotek Pharmaceuticals Corporation, a Delaware corporation (the "Company") of up to 6,210,000 shares (the "Shares") of the Company's Common Stock, \$0.01 par value per share, including Shares purchasable by the underwriters upon their exercise of an option granted to the underwriters by the Company. The Shares are being sold to the several underwriters named in, and pursuant to, an underwriting agreement among the Company and such underwriters (the "Underwriting Agreement").

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 opinions set forth below, on certificates 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).

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, when the Shares have been issued and delivered against payment in accordance with the terms approved by a duly authorized committee of the Board of Directors, the Shares will be validly issued, fully paid and non-assessable.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the 462(b) Registration Statement and to the references to our firm under the caption "Legal Matters" in the Initial 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 this Registration Statement on Form S-1 of Inotek Pharmaceuticals Corporation filed pursuant to Rule 462(b) under Securities Act of 1933, as amended, of our report dated March 31, 2015, relating to our audit of the financial statements, incorporated by reference in the Prospectus, which is a part of the Registration Statement (Form S-1, No. 333-206027) declared effective on August 12, 2015.

We also consent to the reference to our firm under the caption "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ McGladrey, LLP

Boston, Massachusetts
August 12, 2015