

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934

Inotek Pharmaceuticals Corporation

(Name of Issuer)

Common Stock, \$0.001 par value per share

(Title of Class of Securities)

45780V102

(CUSIP Number)

**David R. Ramsay
Care Capital III LLC
47 Hulfish Street, Suite 310
Princeton, New Jersey 08542
609-683-8300**

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

February 23, 2015

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 45780V102

1. Names of Reporting Persons
Care Capital III LLC

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)
AF

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
1,521,682

9. Sole Dispositive Power
0

10. Shared Dispositive Power
1,521,682

11. Aggregate Amount Beneficially Owned by Each Reporting Person
1,521,682

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
9.6%

14. Type of Reporting Person (See Instructions)
OO (Other)

2

1. Names of Reporting Persons
Care Capital Investments III LP

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) x

(b) o

3. SEC Use Only

4. Source of Funds (See Instructions)
WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
1,496,690

9. Sole Dispositive Power
0

10. Shared Dispositive Power
1,496,690

11. Aggregate Amount Beneficially Owned by Each Reporting Person
1,496,690

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
9.4%

14. Type of Reporting Person (See Instructions)
PN

3

1. Names of Reporting Persons
Care Capital Offshore Investments III LP

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) x

(b) o

3. SEC Use Only

4. Source of Funds (See Instructions)
WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Cayman Islands

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
24,992

9. Sole Dispositive Power
0

10. Shared Dispositive Power
24,992

11. Aggregate Amount Beneficially Owned by Each Reporting Person
24,992

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
0.2%

14. Type of Reporting Person (See Instructions)
PN

4

1. Names of Reporting Persons
Care Capital II LLC

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

8. Shared Voting Power
765,314

9. Sole Dispositive Power
0

10. Shared Dispositive Power
765,314

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

11. Aggregate Amount Beneficially Owned by Each Reporting Person
765,314

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
4.8%

14. Type of Reporting Person (See Instructions)
OO (Other)

1. Names of Reporting Persons
Care Capital Investments II LP

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) x

(b) o

3. SEC Use Only

4. Source of Funds (See Instructions)
WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Delaware

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
716,164

9. Sole Dispositive Power
0

10. Shared Dispositive Power
716,164

11. Aggregate Amount Beneficially Owned by Each Reporting Person
716,164

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
4.5%

14. Type of Reporting Person (See Instructions)
PN

6

1. Names of Reporting Persons
Care Capital Offshore Investments II LP

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) x

(b) o

3. SEC Use Only

4. Source of Funds (See Instructions)
WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Cayman Islands

7. Sole Voting Power
0

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
49,150

9. Sole Dispositive Power
0

10. Shared Dispositive Power
49,150

11. Aggregate Amount Beneficially Owned by Each Reporting Person
49,150

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
0.3%

14. Type of Reporting Person (See Instructions)
PN

Item 1. Security and Issuer

This Schedule 13D relates to the common stock, par value \$0.001 per share, (the "Common Stock") of Inotek Pharmaceuticals Corporation, a Delaware corporation (the "Issuer"). The principal executive offices of the Issuer are located at 131 Hartwell Avenue, Suite 105, Lexington, Massachusetts 02421.

Item 2. Identity and Background

(a) This statement is being filed jointly on behalf of the following persons (the "Filing Persons"): Care Capital III LLC, a Delaware limited liability company ("Care Capital III"), Care Capital Investments III LP, a Delaware limited partnership ("Care Investments III"), Care Capital Offshore Investments III LP, a Cayman Islands exempted limited partnership ("Care Offshore III"), Care Capital II LLC, a Delaware limited liability company ("Care Capital II"), Care Capital Investments II LP, a Delaware limited partnership ("Care Investments II") and Care Capital Offshore Investments II LP, a Cayman Islands exempted limited partnership ("Care Offshore II"). Care Capital III is the general partner of Care Investments III and Care Offshore III and as a result, Care Capital III has the ultimate power to vote or direct the vote and to dispose or direct the disposition of such shares. Care Capital II is the general partner of Care Investments II and Care Offshore II and as a result, Care Capital II has the ultimate power to vote or direct the vote and to dispose or direct the disposition of such shares. Richard Markham, Jan Leschly, Argeris N.

Karabelas and David R. Ramsay are the four managing members of Care Capital III and Care Capital II, and in their capacity as such, may be deemed to exercise shared voting and investment power over the shares held by the reporting persons, each of whom disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein. The Filing Persons specifically disclaim beneficial ownership in the securities reported herein except to the extent of any pecuniary interest therein.

(b) The address of the principal business and office of each of the Filing Persons and is 47 Hulfish Street, Suite 310, Princeton, NJ 08542.

(c) The principal business of each of Care Investments III, Care Offshore III, Care Investments II and Care Offshore II is to invest in securities. The principal business of Care Capital III is to serve as the general partner of Care Investments III and Care Offshore III and the principal business of Care Capital II is to serve as the general partner of Care Investments II and Care Offshore II.

(d) During the five years prior to the date hereof, none of the Filing Persons or, to the best knowledge of the Filing Persons, any managing member of any of the Filing Persons, has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) During the last five years prior to the date hereof, none of the Filing Persons or, to the best knowledge of the Filing Persons, any managing member of the Filing Persons, was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of which such person was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

On February 17, 2015, the Registration Statement on Form S-1 filed with the Securities and Exchange Commission by the Issuer (File No. 333-199859) in connection with its initial public offering of \$20 million of 5.0% Convertible Senior Notes due 2020 and 6,667,000 shares of Common Stock of the Issuer (the "IPO") was declared effective. The closing of the IPO took place on February 23, 2015, and at such closing Care Investments III purchased 593,913 shares of Common Stock and Care Offshore III purchased 9,919 shares of Common Stock at the IPO price of \$6.00 per share.

In addition, immediately prior to the closing of the IPO, (i) 2,850,936 shares of Series AA Preferred Stock of the Issuer ("Series AA Stock") held by Care Investments III automatically converted into 833,811 shares of Common Stock, (ii) 47,612 shares of Series AA Stock held by Care Offshore III automatically converted into 13,921 shares of Common Stock, (iii) 1,460,829 shares of Series AA Stock held by Care Investments II automatically converted into 511,781 shares of Common Stock, (iv) 100,281 shares of Series AA Stock held by Care Offshore II automatically converted into 35,132 shares of Common Stock, (v) \$375,097.89 of Convertible Promissory Notes of the Issuer (the "Notes") held by Care Investments III automatically converted into 62,516 shares of Common Stock and (vi) \$6,264.25 of Notes held by Care Offshore III automatically converted into 1,044 shares of Common Stock. Prior to the IPO, the Notes were purchased from the Issuer in a series of private transactions for an aggregate purchase price of \$376,167.93.

Further, on August 28, 2014, the Issuer granted to Argeris N. Karabelas, a managing member of Care Capital II and Care Capital III and a member of the board of directors of the Issuer, options to purchase 9,857 shares of Common Stock, which options are fully vested. Under the partnership agreements for each of Care Capital II and Care Capital III, Dr. Karabelas is deemed to hold this option for the benefit of the Reporting Persons in the following amounts: (i) 6,450 shares held for the benefit of Care Investments III, (ii) 108 shares held for the benefit of Care Offshore III, (iii) 3,087 shares held for the benefit of Care Investments II and (iv) 212 shares held for the benefit of Care Offshore II. Dr. Karabelas must exercise the option solely upon the direction of the Filing Persons, which are entitled to the shares issued upon exercise. The Filing Persons may be deemed the indirect beneficial owner of the option, and Dr. Karabelas may be deemed the indirect beneficial owner of the option through his indirect interest in the Filing Persons. Dr. Karabelas disclaims beneficial ownership of the option except to the extent of his pecuniary interest therein.

The working capital of the Filing Persons was the source of the funds for the purchase of the securities described above. No part of the purchase price of the securities described above was represented by funds or other consideration borrowed or otherwise obtained for the purpose of acquiring, holding, trading or voting the securities described above.

Item 4. Purpose of Transaction

The Filing Persons acquired the securities described above for investment purposes. Depending on market conditions, its continuing evaluation of the business and prospects of the Issuer, the term of the investment vehicles holding the securities and other factors, the Filing Persons may dispose of such shares of the Issuer. The Filing Persons expect to consider and evaluate on an ongoing basis all their options with respect to dispositions of their investment in the Issuer.

The Filing Persons may at any time or from time to time formulate plans or proposals regarding the Issuer or its securities to the extent deemed advisable by the Filing Persons in light of their general investment policies, market conditions, subsequent developments affecting the Issuer, the general business and future prospects of the Issuer, or other factors. The Filing Persons may change any of their plans or proposals at any time or from time to time, and may take any actions they deem appropriate with respect to their investment. Subject to market conditions, the Filing Persons' general investment policies and other factors, the Filing Persons may continue to hold some or all of their ownership in the Issuer or may at any time or from time to time decrease their ownership interest in the Issuer (including by way of open market or privately negotiated transactions or a distribution of some or all the Issuer's securities held by the Funds to their partners). There can be no assurance as to when, over what period of time, or to what extent they may decide to decrease their ownership interest in the Issuer.

None of the Filing Persons, has any plans that would result in:

- (a) The acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer;
- (b) An extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries;
- (c) A sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries;
- (d) Any change in the present board of directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;
- (e) Any material change in the present capitalization or dividend policy of the Issuer;

(f) Any other material change in the Issuer's business or corporate structure including but not limited to, if the Issuer is a registered closed-end investment company, any plans or proposals to make any changes in its investment policy for which a vote is required by section 13 of the Investment Company Act of 1940;

(g) Changes in the Issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person;

(h) Causing a class of securities of the Issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;

(i) A class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act; or

(j) Any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer

(a) As more fully described in Item 3 above, (i) Care Investments III is the beneficial owner of 1,496,690 shares of the Issuer's Common Stock, consisting of 1,490,240 shares of Common Stock and options to purchase 6,450 shares of Common Stock held by Dr. Karabelas that are exercisable within 60 days of the date of this filing, representing 9.4% of the Issuer's shares of Common Stock outstanding and (ii) Care Offshore III is the beneficial owner of 24,992 shares of the Issuer's Common Stock, consisting of 24,884 shares of Common Stock and options to purchase 108 shares of Common Stock held by Dr. Karabelas that are exercisable within 60 days of the date of this filing, representing 0.2% of the Issuer's shares of Common Stock outstanding. By virtue of Care Capital III's status as general partner of Care Investments III and Care Offshore III, Care Capital III may be deemed the beneficial owner of 1,521,682 shares of the Issuer's Common Stock held by Care Investments III and Care Offshore III, consisting of 1,515,124 shares of Common Stock and options to purchase 6,558 shares of Common Stock held by Dr. Karabelas that are exercisable within 60 days of the date of this filing, representing 9.6% of the Issuer's shares of Common Stock outstanding.

As more fully described in Item 3 above, (i) Care Investments II is the beneficial owner of 716,164 shares of the Issuer's Common Stock, consisting of 713,077 shares of Common Stock and options to purchase 3,087 shares of Common Stock held by Dr. Karabelas that are exercisable within 60 days of the date of this filing, representing 4.5% of the Issuer's shares of Common Stock outstanding and (ii) Care Offshore II is the beneficial owner of 49,150 shares of the Issuer's Common Stock, consisting of 48,938 shares of Common Stock and options to purchase 212 shares of Common Stock held by Dr. Karabelas that are exercisable within 60 days of the date of this filing, representing 0.3% of the Issuer's shares of Common Stock outstanding. By virtue of Care Capital II's status as general partner of Care Investments II and Care Offshore II, Care Capital II may be deemed the beneficial owner of 765,314 shares of the Issuer's Common Stock held by Care Investments II and Care Offshore II, consisting of 762,015 shares of Common Stock and options to purchase 3,299 shares of Common Stock held by Dr. Karabelas that are exercisable within 60 days of the date of this filing, representing 4.8% of the Issuer's shares of Common Stock outstanding.

The percentage calculations are based upon 15,877,490 shares of Common Stock outstanding as of February 23, 2015 based on information provided by the Issuer. Each of Care Capital III and Care Capital II disclaims beneficial ownership of the securities referenced in this Schedule 13D, and this report shall not be deemed an admission that either Care Capital III and Care Capital II is the beneficial owner of such securities for purposes of Section 16 or for any other purpose, except to the extent of its pecuniary interest therein.

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(b) By virtue of its status as general partner of Care Investments III and Care Offshore III, Care Capital III, may be deemed to share voting and dispositive power with respect to the 1,496,690 shares of Issuer's Common Stock beneficially owned by Care Investments III and 24,992 shares of Issuer's Common Stock beneficially owned by Care Offshore III. Care Capital III disclaims beneficial ownership of the securities and this report shall not be deemed an admission that Care Capital III is the beneficial owner of such securities for purposes of Section 16 or for any other purpose, except to the extent of its pecuniary interest therein. By virtue of its status as general partner of Care Investments II and Care Offshore II, Care Capital II, may be deemed to share voting and dispositive power with respect to the 716,164 shares of Issuer's Common Stock beneficially owned by Care Investments II and 49,150 shares of Issuer's Common Stock beneficially owned by Care Offshore II. Care Capital II disclaims beneficial ownership of the securities and this report shall not be deemed an admission that Care Capital II is the beneficial owner of such securities for purposes of Section 16 or for any other purpose, except to the extent of its pecuniary interest therein.

(c) During the past sixty days prior to the date hereof, the following transactions occurred:

Other than as described in Items 3 and 4 above, during the past sixty days prior to the date hereof, the Filing Persons have not engaged in any transaction in the Issuer's Common Stock.

(d) No person, other than Care Capital III, is known to have the right to receive or the power to direct the receipt of dividends from, or any proceeds from the sale of, the shares of Common Stock beneficially owned by each of Care Investments III and Care Offshore III and no person, other than Care Capital II, is known to have the right to receive or the power to direct the receipt of dividends from, or any proceeds from the sale of, the shares of Common Stock beneficially owned by each of Care Investments II and Care Offshore II.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Board of Directors

Argeris N. Karabelas was elected as a director of the Issuer pursuant to a stockholders agreement that the Issuer had entered into with certain holders of its securities, including the Filing Persons. The stockholders agreement terminated upon the closing of the IPO, and there is no further contractual obligation regarding the election of directors. Dr. Karabelas will hold office until his successor has been elected and qualified or until the earlier of his resignation or removal.

Lock-Up Agreement

Care Investments III, Care Offshore III, Care Investments II, Care Offshore II, certain other stockholders and each director and officer of the Issuer agreed with Cowen and Company, LLC and Piper Jaffray & Co., as representatives of the several underwriters (the "Underwriters"), pursuant to a lock-up agreement (each, a "Lock-Up Agreement"), for the period beginning on the date of such Lock-Up Agreement and

continuing through the close of trading on the date that is 180 days after February 17, 2015, subject to certain exceptions, not to offer, sell, assign or transfer any Common Stock of the Issuer without the prior written consent of the Underwriters, as set forth in greater detail in the Lock-Up Agreement attached hereto as Exhibit 1.

Investors' Rights Agreement

Care Investments III, Care Offshore III, Care Investments II, Care Offshore II and certain other stockholders (collectively, the "Holders") of the Issuer are parties to the third amended and restated investor rights agreement, dated as of June 9, 2010 (the "Investor Rights Agreement"), with the Issuer. With the closing of the IPO, holders of approximately 8.6 million shares of Common Stock have the right to require the Issuer to register these shares ("Registrable Shares") under the Securities Act under specified circumstances and will have incidental registration rights as described below. After registration pursuant to these rights, these shares will become freely tradable without restriction under the Securities Act.

Demand Registration Rights

At any time after 180 days after the closing of this offering, holders of Registrable Shares are entitled to demand registration rights. Under the terms of the Investor Rights Agreement, the Issuer will be required, upon the written request of holders of at least 50% of the Registrable Shares, to register shares with an anticipated aggregate offering price of at least \$5,000,000, to use commercially reasonable efforts to effect the registration of at least 25% of shares of Registrable Shares, subject to certain exceptions. The Issuer is required to effect only two registrations pursuant to this provision of the Investor Rights Agreement.

Form S-3 Registration Rights

Holders of Registrable Shares are also entitled to short form registration rights. If the Issuer is eligible to file a registration statement on Form S-3, upon the written request of Registrable Shares to register shares with an anticipated aggregate offering price of at least \$1,000,000, the Issuer will be required to use best efforts to effect a registration of such shares, subject to certain exceptions.

Piggyback Registration Rights

Holders of Registrable Shares are entitled to piggyback registration rights. If the Issuer proposes to register any of its securities either for its own account or for the account of other security holders, the holders of Registrable Shares are entitled to include their shares in the registration. Subject to certain exceptions, the Issuer and the underwriters may limit the number of shares included in the underwritten offering if the underwriters believe that including these shares would adversely affect the offering.

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Expenses of Registration, Indemnification and Termination

The Investors' Rights Agreement contains customary provisions with respect to the expenses of a registration, indemnification and termination of the agreement.

The foregoing description of the terms of the Investors' Rights Agreement and the Lock-up Agreement is intended as a summary only and is qualified in its entirety by reference to the Investors' Rights Agreement and Form of Lock-up Agreement, which are filed as exhibits to this Schedule 13D and incorporated by reference herein.

Other than as described in this Schedule 13D, to the knowledge of the Filing Persons, there are no contracts, arrangements, understanding or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Issuer.

Item 7. Material to be Filed as Exhibits

Exhibit 1

Joint Filing Agreement as required by Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended.

Exhibit 2

Form of Lock-up Agreement.

Exhibit 3

Third Amended and Restated Investor Rights Agreement, dated as of June 9, 2010 by and among the Issuer and the parties signatory thereto, filed as Exhibit 4.2 to the Issuer's Registration Statement on Form S-1 (SEC File No. 333-199859), filed with the SEC on November 5, 2014.

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Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: March 5, 2015

Care Capital III LLC

By: /s/ David R. Ramsay

Name: David R. Ramsay

Dated: March 5, 2015

Title: Partner

Care Capital Investments III L.P.

By: Care Capital III LLC, its General Partner

By: /s/ David R. Ramsay

Name: David R. Ramsay

Title: Partner

Dated: March 5, 2015

Care Capital Offshore Investments III LP

By: Care Capital III LLC, its General Partner

By: /s/ David R. Ramsay

Name: David R. Ramsay

Title: Partner

Dated: March 5, 2015

Care Capital II LLC

By: /s/ David R. Ramsay

Name: David R. Ramsay

Title: Partner

Dated: March 5, 2015

Care Capital Investments II L.P.

By: Care Capital II LLC, its General Partner

By: /s/ David R. Ramsay

Name: David R. Ramsay

Title: Partner

Dated: March 5, 2015

Care Capital Offshore Investments II LP

By: Care Capital II LLC, its General Partner

By: /s/ David R. Ramsay

Name: David R. Ramsay

Title: Partner

ATTENTION

Intentional misstatements or omissions of fact constitute Federal Criminal Violations (See 18 U.S.C. 1001).

JOINT FILING AGREEMENT

Pursuant to and in accordance with the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the rules and regulations thereunder, each party hereto hereby agrees to the joint filing, on behalf of each of them, of any filing required by such party under Section 13 of the Exchange Act or any rule or regulation thereunder (including any amendment, restatement, supplement, and/or exhibit thereto) with the Securities and Exchange Commission (and, if such security is registered on a national securities exchange, also with the exchange), and further agrees to the filing, furnishing, and/or incorporation by reference of this agreement as an exhibit thereto. This agreement shall remain in full force and effect until revoked by any party hereto in a signed writing provided to each other party hereto, and then only with respect to such revoking party.

IN WITNESS WHEREOF, each party hereto, being duly authorized, has caused this agreement to be executed and effective as of the date set forth below.

Dated: March 5, 2015

Care Capital III LLC

By: /s/ David R. Ramsay

Name: David R. Ramsay

Title: Partner

Dated: March 5, 2015

Care Capital Investments III L.P.

By: Care Capital III LLC, its General Partner

By: /s/ David R. Ramsay

Name: David R. Ramsay

Title: Partner

Dated: March 5, 2015

Care Capital Offshore Investments III LP

By: Care Capital III LLC, its General Partner

By: /s/ David R. Ramsay

Name: David R. Ramsay

Title: Partner

Dated: March 5, 2015

Care Capital II LLC

By: /s/ David R. Ramsay

Name: David R. Ramsay

Title: Partner

Dated: March 5, 2015

Care Capital Investments II L.P.

By: Care Capital II LLC, its General Partner

By: /s/ David R. Ramsay

Name: David R. Ramsay

Title: Partner

Dated: March 5, 2015

Care Capital Offshore Investments II LP

By: Care Capital II LLC, its General Partner

By: /s/ David R. Ramsay

Name: David R. Ramsay

Title: Partner

[DATE], 2014

COWEN AND COMPANY, LLC
PIPER JAFFRAY & CO.

As Representatives of the several Underwriters
c/o Cowen and Company, LLC
599 Lexington Avenue
New York, New York 10022

Re: Inotek Pharmaceuticals Corporation — Registration Statement on Form S-1 for Shares of Common Stock

Dear Sirs:

This Agreement is being delivered to you in connection with the proposed Underwriting Agreement (the “Underwriting Agreement”) between Inotek Pharmaceuticals Corporation, a Delaware corporation (the “Company”), Cowen and Company, LLC (“Cowen”) and Piper Jaffray & Co. (“Piper”), as representatives (the “Representatives”) of a group of underwriters (collectively, the “Underwriters”), to be named therein, and the other parties thereto (if any), relating to the proposed public offering of shares of the common stock (the “Offering”), par value \$0.01 per share (the “Common Stock”) of the Company.

In order to induce you and the other Underwriters to enter into the Underwriting Agreement, and in light of the benefits that the offering of the Common Stock will confer upon the undersigned in its capacity as a securityholder and/or an officer, director or employee of the Company, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees with each Underwriter that, during the period beginning on the date hereof through and including the date that is the 180th day after the date of the Underwriting Agreement (the “Lock-Up Period”), the undersigned will not, without the prior written consent of Cowen and Piper, directly or indirectly, (i) offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of, or announce the intention to otherwise dispose of, any shares of Common Stock (including, without limitation, Common Stock which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations promulgated under the Securities Act of 1933, as the same may be amended or supplemented from time to time (such shares, the “Beneficially Owned Shares”)) or securities convertible into or exercisable or exchangeable for Common Stock, (ii) enter into any swap, hedge or similar agreement or arrangement that transfers in whole or in part, the economic risk of ownership of the Beneficially Owned Shares or securities convertible into or exercisable or exchangeable for Common Stock, whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition, or (iii) engage in any short selling of the Common Stock or securities convertible into or exercisable or exchangeable for Common Stock.

If the undersigned is an officer or director of the Company, (i) Cowen and Piper agree that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of shares of Common Stock, Cowen and Piper will notify the Company of the impending release or waiver, and (ii) the Company has agreed in the Underwriting Agreement to announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by Cowen and Piper

hereunder to any such officer or director shall only be effective two business day after the publication date of such press release. The provisions of this paragraph will not apply if (a) the release or waiver is effected solely to permit a transfer not for consideration and (b) the transferee has agreed in writing to be bound by the same terms described in this letter to the extent and for the duration that such terms remain in effect at the time of the transfer.

The restrictions set forth in the second paragraph shall not apply:

- (1) if the undersigned is a natural person, to any transfers made by the undersigned (a) as a bona fide gift to any member of the immediate family (as defined below) of the undersigned or to a trust the beneficiaries of which are exclusively the undersigned or members of the undersigned’s immediate family, (b) by will or intestate succession upon the death of the undersigned or (c) as a bona fide gift to a charity or educational institution,
- (2) if the undersigned is a corporation, partnership, limited liability company or other business entity, to any transfers to any stockholder, partner or member of, or owner of a similar equity interest in, the undersigned, as the case may be, if, in any such case, such transfer is not for value,
- (3) if the undersigned is a corporation, partnership, limited liability company or other business entity, to any transfer made by the undersigned (a) in connection with the sale or other bona fide transfer in a single transaction of all or substantially all of the undersigned’s capital stock, partnership interests, membership interests or other similar equity interests, as the case may be, or all or substantially all of the undersigned’s assets, in any such case not undertaken for the purpose of avoiding the restrictions imposed by this agreement or (b) to another corporation, partnership, limited liability company or other business entity so long as the transferee is an affiliate (as defined below) of the undersigned and such transfer is not for value,
- (4) if the undersigned is a director, officer or employee of the Company, to any transfers of Common Stock solely in connection with (a) the exercise of any equity awards outstanding on the date of the Underwriting Agreement granted pursuant to the Company’s equity plans, including any “cashless” exercise thereof, provided that any shares of Common Stock received upon such exercise shall be subject to the restrictions provided for in this agreement, or (b) the surrender or forfeiture to the Company of shares of Common Stock to the Company in partial or full settlement of any withholding tax obligation of the undersigned accruing upon the exercise or vesting of any equity award outstanding on the date of the Underwriting Agreement granted pursuant to the Company’s equity plans,
- (5) to the conversion, exchange or exercise of any securities convertible into or exercisable or exchangeable for Common Stock or Beneficially Owned Shares, provided that any shares of Common Stock or Beneficially Owned Shares received upon such conversion, exchange or exercise continue to be subject to the terms of this agreement,
- (6) to transactions relating to Common Stock or other securities convertible into or exercisable or exchangeable for Common Stock acquired in open market transactions after completion of the Offering, provided that no such transaction is required to be, or is, publicly announced (whether on

Form 4, Form 5 or otherwise) during the Lock-Up Period,

(7) to the entry, by the undersigned, at any time on or after the date of the Underwriting Agreement, of any trading plan providing for the sale of Common Stock by the undersigned, which trading plan meets the requirements of Rule 10b5-1(c) under the Exchange Act, provided, however, that such plan does not provide for, or permit, the sale of any Common Stock during the

Lock-up Period and no public announcement or filing is voluntarily made or required regarding such plan during the Lock-Up Period, and

(8) to transfers pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to holders of Common Stock involving a Change of Control of the Company, provided that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the undersigned's shares of Common stock shall remain subject to the restrictions contained in this letter agreement. "Change of Control" shall mean the transfer (whether by tender offer, merger, consolidation or other similar transaction), in one transaction or a series of related transactions, to a person or group of affiliated persons (other than an Underwriter pursuant to the public offering), of the Company's voting securities if, after such transfer, such person or group of affiliated persons would hold 90% of the outstanding voting securities of the Company (or the surviving entity);

provided, however, that in the case of any transfer described in clause (1), (2) or (3) above, it shall be a condition to the transfer that (A) the transferee executes and delivers to Cowen, acting on behalf of the Underwriters, not later than one business day prior to such transfer, a written agreement, in substantially the form of this agreement (it being understood that any references to "immediate family" in the agreement executed by such transferee shall expressly refer only to the immediate family of the undersigned and not to the immediate family of the transferee) and otherwise satisfactory in form and substance to Cowen and Piper, and (B) in the case of any transfer described in clause (1) or (2) above, if the undersigned is required to file a report under Section 16(a) of the Securities Exchange Act of 1934, as amended, reporting a reduction in beneficial ownership of shares of Common Stock or Beneficially Owned Shares or any securities convertible into or exercisable or exchangeable for Common Stock or Beneficially Owned Shares during the Lock-Up Period, the undersigned shall include a statement in such report to the effect that, (A) in the case of any transfer pursuant to clause (1) above, such transfer is being made as a gift or by will or intestate succession, (B) in the case of any transfer pursuant to clause (2) above, such transfer is being made to a stockholder, partner or member of, or owner of a similar equity interest in, the undersigned and is not a transfer for value, (C) in the case of any transfer pursuant to clause (3) above, such transfer is being made either (a) in connection with the sale or other bona fide transfer in a single transaction of all or substantially all of the undersigned's capital stock, partnership interests, membership interests or other similar equity interests, as the case may be, or all or substantially all of the undersigned's assets or (b) to another corporation, partnership, limited liability company or other business entity that is an affiliate of the undersigned and such transfer is not for value. For purposes of this paragraph, "immediate family" shall mean a spouse, child, grandchild or other lineal descendant (including by adoption), father, mother, brother or sister of the undersigned; and "affiliate" shall have the meaning set forth in Rule 405 under the Securities Act of 1933, as amended.

For avoidance of doubt, nothing in this Agreement prohibits the undersigned from exercising any options or warrants to purchase Common Stock (which exercises may be effected on a cashless basis to the extent the instruments representing such options or warrants permit exercises on a cashless basis), it being understood that any Common Stock issued upon such exercises will be subject to the restrictions of this Agreement.

In order to enable this covenant to be enforced, the undersigned hereby consents to the placing of legends or stop transfer instructions with the Company's transfer agent with respect to any Common Stock or securities convertible into or exercisable or exchangeable for Common Stock.

The undersigned further agrees that it will not, during the Lock-Up Period (as the same may be extended as described above), make any demand or request for or exercise any right with respect to the registration under the Securities Act of 1933, as amended, of any shares of Common Stock or other Beneficially

Owned Shares or any securities convertible into or exercisable or exchangeable for Common Stock or other Beneficially Owned Shares.

This Agreement and all authority herein conferred are irrevocable and shall survive the death or incapacity of the undersigned and shall be binding upon the heirs, personal representatives, successors and assigns of the undersigned.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this agreement and that this agreement has been duly authorized (if the undersigned is not a natural person), executed and delivered by the undersigned and is a valid and binding agreement of the undersigned. This agreement and all authority herein conferred are irrevocable and shall survive the death or incapacity of the undersigned (if a natural person) and shall be binding upon the heirs, personal representatives, successors and assigns of the undersigned.

This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York applicable to agreements made and to be performed in such state.

If (i) the Company notifies Cowen in writing that it does not intend to proceed with the Offering, (ii) the Underwriting Agreement is not executed by April 30, 2015, or (iii) the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated for any reason prior to payment for and delivery of any Common Stock to be sold thereunder, then this Agreement shall immediately be terminated and the undersigned shall automatically be released from all of his or her obligations under this Agreement. The undersigned acknowledges and agrees that whether or not any public offering of Common Stock actually occurs depends on a number of factors, including market conditions.

[Signature page follows]

Very truly yours,

(Name of Stockholder - Please Print)

(Signature)

(Name of Signatory if Stockholder is an entity - Please Print)

(Title of Signatory if Stockholder is an entity - Please Print)

Address:
