

November 26, 2014

VIA EDGAR AND FEDERAL EXPRESS

Division of Corporation Finance
United States Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549
Attention: Jeffrey P. Riedler

**Re: Inotek Pharmaceuticals Corporation
Amendment No. 1. to Registration Statement on Form S-1
Filed November 21, 2014
File No. 333-199859**

Ladies and Gentlemen:

This letter is submitted on behalf of Inotek Pharmaceuticals Corporation (the "**Company**") in response to the November 25, 2014 comment letter (the "**Comment Letter**") of the staff (the "**Staff**") of the Securities and Exchange Commission (the "**Commission**") regarding the Company's Amendment No. 1 to Registration Statement on Form S-1 which was filed with the Commission on November 21, 2014 (the "**Registration Statement**").

For reference purposes, the text of the Comment Letter has been reproduced herein with responses below each numbered comment. For your convenience, we have italicized the reproduced Staff comments from the Comment Letter.

The responses provided herein are based upon information provided to Goodwin Procter LLP by the Company. In addition to submitting this letter via EDGAR, we are sending via Federal Express two (2) copies of this letter.

Capitalization, page 62

- 1. Please expand your pro forma disclosures throughout the filing to explain why assuming that the Series AA redeemable convertible preferred stock will be converted into common stock is factually supportable. Your disclosure on F-20 indicates that automatic conversion occurs only if the price per share in a firmly underwritten public offering is not less than \$7.65. Refer to rule 11-02(b)(6) of Regulation S-X.*

Response: In response to the Staff's comment, the Company respectfully advises the Staff that prior to filing the next amendment to the Registration Statement, the Company expects to receive the requisite consent to approve a new Company charter that removes the provision stating that

the automatic conversion occurs only if the price per share in a firmly underwritten public offering is not less than \$7.65.

Notes to Consolidated Financial Statements

7. Equity

2014 Stock Option and Incentive Plan, page F-24

2. *Please refer to comment 2. It is unclear how you have sufficiently addressed the reasons for the differences between recent valuations of your common stock leading up to the IPO and the estimated offering price considering the significant increase in the fair value from the August 28, 2014 issuance to the midpoint of your price range. Please revise your analysis to address the following items:*
- *Quantify the impact of the fair value increase attributed to the top line results received in October 2014 from the Phase 2 trial in which patients received trabodenson eye drops co-administered with latanoprost eye drops;*
 - *Quantify the discount for lack of marketability and tell us how you determined that it was appropriate; and*
 - *Tell us how you determined that the probabilities of the three possible future scenarios for the Company were appropriate given the DRS was filed August 29, 2014 and the equity capital markets have been highly receptive to early-stage biotechnology life sciences companies in 2014 as noted in your response.*

Response: In response to the Staff's comment, the Company respectfully advises the Staff that it is supplementally providing the Staff with a letter containing an updated estimated offering price range and responses to the Staff's comment.

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We and the Company appreciate the Staff's attention to the review of the matters discussed herein. Please do not hesitate to contact me at: (212) 813-8853 if you have any questions regarding this letter.

Sincerely,

/s/ Edwin M. O'Connor

Edwin M. O'Connor
Goodwin Procter LLP

cc: David P. Southwell, President and Chief Executive Officer, *Inotek Pharmaceuticals Corporation*
Mitchell S. Bloom, *Goodwin Procter LLP*