

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

January 18, 2018

Ramesh Kumar, Ph.D.
President and Chief Executive Officer
Onconova Therapeutics, Inc.
375 Pheasant Run
Newtown, PA 18940

Re: Onconova Therapeutics, Inc.
Registration Statement on Form S-1
Filed December 29, 2017
File No. 333-222374

Dear Dr. Kumar:

We have limited our review of your registration statement to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Form S-1 filed December 29, 2017

Cover Page

- 1. Please tell us whether the recent market price set forth on the cover page of the prospectus will be substantially similar to the offering price. If not, please include disclosure on the cover page indicating the factors that will be used to determine the offering price.
- 2. Please identify the lead underwriter(s) on the prospectus cover page. Please note that we may defer further review of any amendment to your registration statement that does not include the names of the lead underwriter(s).

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Exhibit 23.1

3. Please file a signed consent of your auditors as required by Section 7 of the Securities Act and Item 601(b)(23) of Regulation S-K.

Exhibit 5.1

4. Please file a revised legality opinion that covers the securities included in the registration statement. For example, we note that the opinion references the offer and sale of up to \$25,000,000 of shares of common stock. In addition, it is inappropriate to assume, for purposes of your opinion, that the issuance of shares will not exceed the number of shares available for issuance under the Company's certificate of incorporation. Please revise your opinion to remove this assumption. Refer to Section II.B.3.a. of Staff Legal Bulletin No. 19.

Executive Compensation

5. Please update your executive compensation disclosure to include your most recently completed fiscal year. Refer to Item 402 of Regulation S-K.

Signatures

6. Please revise your signature page to the registration statement and provide the signatures required by Form S-1. We note that you have included such signatures in the power of attorney filed as Exhibit 24.1. Please include these signatures within the body of the registration statement. To the extent you use a power of attorney for future signatures, please ensure it to refers to amendments to the Form S-1, as it currently refers to a Form S-3.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Christine Westbrook at (202) 551-5019 or Erin Jaskot at (202) 551-3442 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Joanne R. Soslow, Esq.