

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

December 4, 2017

Ramesh Kumar, Ph.D.
President and Chief Executive Officer
Onconova Therapeutics, Inc.
375 Pheasant Run
Newtown, PA 18954

Re: Onconova Therapeutics, Inc.
Registration Statement on Form S-3
Filed November 20, 2017
File No. 333-221684

Dear Dr. Kumar:

We have limited our review of your registration statement to those issues we have addressed in our comment.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies 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 this comment, we may have additional comments.

Registration Statement on Form S-3

Selling Stockholders, page 14

1. Based on your disclosure that the selling stockholders will be named in a prospectus supplement, it appears that you intend to rely on General Instruction II.G to Form S-3 to omit the identities of the selling stockholders and amounts of securities registered on their behalf. Please note that General Instruction II.G. is only available to registrants eligible to register primary offerings on Form S-3 pursuant to General Instruction I.B.1, for which you do not appear to be eligible. Please revise your disclosure as appropriate. For guidance, please refer to Rule 430B and Regulation S-K CD&I 140.03.

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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.

You may contact Dorrie Yale at 202-551-8776 or Mary Beth Breslin at 202-551-3625 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Joanne R. Soslow