



DIVISION OF
CORPORATION FINANCE

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

December 1, 2021

Chris Schelling
President and Chief Executive Officer
Acer Therapeutics Inc.
One Gateway Center, Suite 351
300 Washington Street
Newton, MA 02458

Re: Acer Therapeutics Inc.
Registration Statement on Form S-3
Filed November 24, 2021
File No. 333-261342

Dear Mr. Schelling:

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 our comment, we may have additional comments.

Registration Statement on Form S-3

General

1. It appears your public float is not sufficient to meet the Transaction Requirement in Instruction I.B.1 of Form S-3. To the extent you intend rely on Instruction I.B.6 of Form S-3, please file a pre-effective amendment to provide the information required on the cover page. Refer to Instruction 7 of 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.

Chris Schelling
Acer Therapeutics Inc.
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Please contact Abby Adams at (202) 551-6902 or Celeste Murphy at (202) 551-3257 with any questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Patty DeGaetano, Esq.