

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

March 4, 2021

Andrew Sims Chief Financial Officer PLUS THERAPEUTICS, INC. 4200 Marathon Blvd., Suite 200 Austin, TX 78756

> Re: Plus Therapeutics, Inc. Registration Statement on Form S-1 Filed February 26, 2021 File No. 333-253612

Dear Mr. Sims:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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.

Please contact Kasey Robinson at 202-551-5880 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences

cc: Andrew Strong