October 15, 2020

Marc Hedrick, MD President and Chief Executive Officer Plus Therapeutics, Inc. 4200 Marathon Blvd., Suite 200 Austin, TX 78756

Inc.

Re: Plus Therapeutics,

Statement on Form S-3

Registration

Filed October 3,

2020

File No. 333-249410

Dear Mr. Hedrick:

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 Jason L.

Drory at 202-551-8342 with any questions.

Sincerely,

Division of Corporation Finance

Office of Life Sciences

cc: Andrew L. Strong