## PLUS THERAPEUTICS, INC. 4200 Marathon Blvd., Suite 200 Austin, Texas 78756

March 5, 2021

## VIA FACSIMILE AND EDGAR

Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549

Re: Plus Therapeutics, Inc. - Registration Statement – Form S-1

File No. 333-253612

## Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Plus Therapeutics, Inc. (the "**Registrant**") hereby requests that the effective date of the above-referenced registration statement on Form S-1 (File No. 333-253612) (the "**Registration Statement**") be declared effective on March 9, 2021, at 4:00 p.m., Eastern Time, or as soon thereafter as is practicable or at such later time as the Registrant may orally request via telephone call to the staff of the Commission. The Registrant hereby authorizes each of Davina K. Kaile and Ian L. Cohen of Pillsbury Winthrop Shaw Pittman LLP, counsel to the Registrant, to make such request on its behalf.

Once the Registration Statement has been declared effective, please orally confirm that event with Davina K. Kaile of Pillsbury Winthrop Shaw Pittman LLP, counsel to the Registrant, at (650) 233-4564, or in her absence, Ian L. Cohen at (212) 858-1185.

[Signature Page Follows]

Sincerely,

PLUS THERAPEUTICS, INC.

By: /s/ Marc H. Hedrick, MD

Marc H. Hedrick, MD President and Chief Executive Officer

cc: Andrew Sims

Davina K. Kaile, Esq.