

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

September 8, 2021

**VIA EDGAR**

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

**Re: Plus Therapeutics, Inc.  
Registration Statement on Form S-1 (File No. 333-259325)  
Request for Acceleration of Effective Date**

Ladies and Gentlemen:

Pursuant to Rule 461 of the General Rules and Regulations under the Securities Act of 1933, as amended, Plus Therapeutics, Inc., a Delaware corporation, hereby requests that the Securities and Exchange Commission accelerate the effective date of the above-referenced Registration Statement on Form S-1 (File No. 333-259325) and declare the Registration Statement effective as of Friday, September 10, 2021, at 5:00 p.m., Eastern time, or as soon as practicable thereafter.

Please contact the undersigned at (737) 255-7194, or Nicholas Griffin of Hogan Lovells US LLP at (713) 632-1488 with any questions. Also, please notify Mr. Griffin when this request for acceleration has been granted.

Very truly yours,

PLUS THERAPEUTICS, INC.

By: /s/ Andrew Sims

Name: Andrew Sims

Title: Chief Financial Officer

cc: Nicholas Griffin, *Hogan Lovells US LLP*