

**T2 BIOSYSTEMS, INC.
101 HARTWELL AVE.
LEXINGTON, MA 02421**

April 7, 2021

VIA EDGAR TRANSMISSION

Securities and Exchange Commission
Division of Corporation Finance
Mail Stop 4720
100 F Street, N.E.
Washington, D.C. 20549

Re: T2 BIOSYSTEMS, INC.

Registration Statement on Form S-3 (Registration No. 333-254918)

Ladies and Gentlemen:

In accordance with Rule 461 under the Securities Act of 1933, as amended, we hereby request acceleration of the effective date of the Registration Statement on Form S-3 (Registration No. 333- 254918) (the "Registration Statement") of T2 Biosystems, Inc. (the "Company"). We respectfully request that the Registration Statement become effective as of 4:30 p.m., Eastern Time, on April 9, 2021, or at such later time as the Company or its counsel may orally request via telephone call to the staff. Please contact Evan Smith of Latham & Watkins LLP, counsel to the Company, at (781) 434-6608, or in his absence, Johan Brigham, at (617) 948-6008, to provide notice of effectiveness, or if you have any other questions or concerns regarding this matter.

Very truly yours,

T2 BIOSYSTEMS, INC.

By: /s/ John Sperzel

Name: John Sperzel

Title: President and Chief Executive Officer

cc: Michael T. Gibbs, T2 Biosystems, Inc.
John M. Sprague, T2 Biosystems, Inc.
Evan G. Smith, Latham & Watkins LLP
Johan V. Brigham, Latham & Watkins LLP