

**T2 BIOSYSTEMS, INC.**  
**101 Hartwell Ave.**  
**Lexington, MA 02421**

October 22, 2018

**VIA EDGAR**

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

Re: T2 Biosystems, Inc.  
Registration Statement on Form S-3 (File No. 333-227847)

Dear Mr. Buchmiller:

In accordance with Rule 461 under the Securities Act of 1933, as amended, T2 Biosystems, Inc. (the "Company") hereby requests the acceleration of the effective date of the above-referenced Registration Statement so that it will become effective at 4:00 p.m. Eastern Time on Wednesday, October 24, 2018, or as soon thereafter as practicable.

If you have any questions or require additional information, please contact Evan Smith of Latham & Watkins LLP at (781) 434-6608. Thank you for your assistance and cooperation in this matter.

Sincerely yours,

**T2 Biosystems, Inc.**

By: /s/ Michael T. Gibbs

Michael T. Gibbs  
General Counsel

cc: Johan V. Brigham, Esq. (via e-mail)  
Evan G. Smith, Esq. (via e-mail)

*[Signature Page to Acceleration Request Letter (Registration Statement on Form S-3)]*