T2 Biosystems, Inc. 101 Hartwell Avenue Lexington, MA 02421

September 13, 2023

VIA EDGAR TRANSMISSION

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

Re: T2 Biosystems, Inc.

Registration Statement on Form S-3

File No. 333-274182

To the addressee set forth above:

T2 Biosystems, Inc. (the "Company") hereby respectfully requests the withdrawal of its acceleration request letter filed as correspondence via EDGAR transmission on September 11, 2023, which requested that the Registration Statement on Form S-3 (File No. 333-274182) filed on August 24, 2023 become effective on Tuesday, September 12, 2023, at 4:30 p.m., Eastern Time, or as soon as reasonably practicable thereafter. The Company is no longer requesting that such Registration Statement be declared effective at this specific date and time and the Company hereby formally withdraws its request for acceleration of the effective date as stated above.

Furthermore, in accordance with Rule 461 of Regulation C of the General Rules and Regulations under the Securities Act of 1933, as amended, the Company hereby requests the acceleration of the effective date of the Registration Statement on Form S-3 (File No. 333-274182) filed on August 24, 2023, so that it will become effective on September 15, 2023, at 4:30 p.m., Eastern Time, or as soon thereafter as practicable, or at such later time as the Company or its counsel may request via telephone call to the staff.

Please contact N. Danny Shulman of Latham & Watkins LLP, counsel to the Company, at (212) 906-4510, or in his absence, Evan G. Smith at (617) 948-6089, if you have any questions or concerns regarding this matter.

Very truly yours,

T2 BIOSYSTEMS, INC.

By: /s/ Michael T. Gibbs

Michael T. Gibbs General Counsel

cc: Evan G. Smith, Esq., Latham & Watkins LLP
N. Danny Shulman, Esq., Latham & Watkins LLP