



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

July 11, 2014

Via E-mail

John McDonough
President and Chief Executive Officer
T2 Biosystems, Inc.
101 Hartwell Avenue
Lexington, Massachusetts 02421

**Re: T2 Biosystems, Inc.
Registration Statement on Form S-1
Filed July 2, 2014
File No. 333-197193**

Dear Mr. McDonough:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Clinical Utility, page 75

1. Please tell us with specificity where you revised the disclosure in response to the penultimate sentence of prior comment 3 regarding how spiking is done. In this regard, we note that you continue to refer on page 77 to “spiking clinical isolates” and “samples were spiked.”
2. Please tell us with specificity where you revised the disclosure in response to the last sentence of prior comment 3 regarding why results might not be included. In this regard, we note that you continue to disclose in footnote (1) to the table on page 80 that discordant results are not included.

John McDonough
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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Tom Jones at (202) 551-3602 or me at (202) 551-3528 with any questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director

cc (via e-mail): Johan V. Brigham