

April 18, 2019

Waleed H. Hassanein, M.D.
President and Chief Executive Officer
TransMedics Group, Inc.
200 Minuteman Road
Andover, MA 01810

Re: TransMedics Group, Inc.
Registration Statement on Form S-1
Filed April 5, 2019
File No. 333-230736

Dear Dr. Hassanein:

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.

Form S-1 filed on April 5, 2019

General

1. Given your current level of development and your net revenue for the past three fiscal years, it does not appear appropriate to refer in your graphics to "Expanding the rate of successful transplant and improving clinical outcomes to save more lives." Please advise or revise. Our restated articles of organization will designate the Business Litigation Session, page 53

2. We note that your restated articles of organization will designate the Business Litigation Session of the Superior Court of Suffolk County, Massachusetts (or, if any only if the Business Litigation Session of the Superior Court of Suffolk County lacks jurisdiction, another state or federal court located within the Commonwealth of Massachusetts) as the sole and exclusive forum for any derivative action or proceeding brought on your behalf. Please disclose whether this provision will apply to actions arising under the Securities Act or Exchange Act. In that regard, we note that Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder, and Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. If the provision will apply to Securities Act claims, please also revise your registration statement to disclose this information and to state that there is uncertainty as to whether a court would enforce such provision, and to state that stockholders will not be deemed to have waived the company's compliance with the

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federal securities laws and the rules and regulations thereunder. If this provision will not apply to actions arising under the Securities Act or Exchange Act, please also ensure that the exclusive forum provision in the governing documents states this clearly.
Consolidated Balance Sheet, page F-3

3. Tell us why, in the pro forma column, you present the \$331 million amount of your no par value common stock in the Additional Paid-in Capital caption. We note that in the Capitalization table on page 60 you present the amount in the pro forma Common Stock caption. Please revise the filing to correctly and consistently present these amounts.

FirstName LastNameWaleed H. Hassanein, M.D.

Exhibits

Comapany NameTransMedics Group, Inc.

4.

April 18, 2019 Page an exhibit the waiver mentioned on page 31.

Please file as 2

FirstName LastName

Waleed H. Hassanein, M.D.

FirstName LastNameWaleed H. Hassanein, M.D.

TransMedics Group, Inc.

Comapany NameTransMedics Group, Inc.

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FirstName LastName

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Tara Harkins at 202-551-3639 or Kevin Kuhar, Accounting Branch Chief, at 202-551-3662 if you have questions regarding comments on the financial statements and related matters. Please contact Thomas Jones at 202-551-3602 or Heather Percival, Senior Attorney, at 202-551-3498 with any other questions.

Sincerely,

Division of

Office of

Corporation Finance

Electronics and Machinery

cc: Tara Fisher