TRANSMEDICS GROUP, INC.

200 Minuteman Road Andover, Massachusetts 01810

April 29, 2019

VIA EDGAR

Securities and Exchange Commission Division of Corporate Finance 100 F Street, N.E.

Washington, D.C. 20549

Attention: Thomas Jones

Heather Percival

Re: TransMedics Group, Inc.

Registration Statement on Form S-1 (File No. 333-230736)

Request for Acceleration

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, TransMedics Group, Inc., a Massachusetts corporation (the "Company"), hereby requests that the effective date for the registration statement referred to above be accelerated so that it will be declared effective at 4:00 p.m. Eastern Time on May 1, 2019, or as soon as possible thereafter. The Company hereby authorizes Paul Kinsella or Tara Fisher of Ropes & Gray LLP, counsel to the Company, to orally modify or withdraw this request for acceleration.

Please call Tara Fisher of Ropes & Gray LLP, counsel to the Company, at (617) 235-4824 as soon as the registration statement has been declared effective.

[Signature page follows]

Very truly yours,

TRANSMEDICS GROUP, INC.

By: /s/ Stephen Gordon
Name: Stephen Gordon

Title: Chief Financial Officer, Treasurer and Secretary

Signature Page to Acceleration Request