UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT UNDER

THE SECURITIES ACT OF 1933

TRANSMEDICS GROUP, INC.

(Exact name of registrant as specified in its charter)

Massachusetts (State or other jurisdiction of incorporation or organization)

> 83-2181531 (IRS Employer Identification No.)

200 Minuteman Road Andover, Massachusetts 01810 (Address of Principal Executive Offices) (Zip Code)

TransMedics Group, Inc. Amended and Restated 2019 Stock Incentive Plan (Full title of the plan)

> Waleed H. Hassanein, M.D. President and Chief Executive Officer TransMedics Group, Inc. 200 Minuteman Road Andover, Massachusetts 01810 (Name and address of agent for service)

(978) 552-0900 (Telephone number, including area code, of agent for service)

Copies to:

Tara Fisher Ropes & Gray LLP Prudential Tower 800 Boylston Street Boston, MA 02199-3600 (617) 951-7000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer", "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer \square

Non-accelerated filer \Box

Accelerated filerISmaller reporting companyIEmerging growth companyI

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

Statement of Incorporation by Reference

This Registration Statement on Form S-8, relating to the Amended and Restated 2019 Stock Incentive Plan of TransMedics Group, Inc. (the "Registrant"), is being filed for the purpose of registering additional securities of the same class as other securities for which a Registration Statement on Form S-8 has previously been filed and is effective. The Registrant increased the number of shares of its common stock, no par value per share ("Common Stock") available for issuance under its Amended and Restated 2019 Stock Incentive Plan by 1,000,000 shares. Pursuant to General Instruction E to Form S-8, this Registration Statement incorporates by reference the contents of the Registration Statement on Form S-8 (File No. 333-231243) filed with the Securities and Exchange Commission on May 6, 2019 by the Registrant, relating to the Registrant's 2019 Stock Incentive Plan, except to the extent supplemented, amended or superseded by the information set forth herein.

Item 8. Exhibits.

EXHIBIT INDEX

| Exhibit Number | Description | | | | | |
|-------------------|---|--|--|--|--|--|
| 4.1 | <u>Restated Articles of Organization (incorporated by reference to Exhibit 3.1 to the Registrant's Annual Report on Form 10-K (File</u> <u>No. 001-38891) filed with the SEC on March 17, 2020)</u> | | | | | |
| 4.2 | Amended and Restated Bylaws (incorporated by reference to Exhibit 3.4 to the Registrant's Registration Statement on Form S-1 (File No. 333-230736) filed with the SEC on April 22, 2019) | | | | | |
| 4.3 | Specimen stock certificate evidencing shares of common stock (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-230736) filed with the SEC on April 5, 2019). | | | | | |
| 4.4 | TransMedics Group, Inc. Amended and Restated 2019 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Regist Current Report on Form 8-K (File No. 001-38891) filed with the SEC on May 26, 2023) | | | | | |
| 5.1 | <u>Opinion of Ropes & Gray LLP.</u> | | | | | |
| 23.1 | Consent of Ropes & Gray LLP (included in Exhibit 5.1). | | | | | |
| 23.2 | Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm. | | | | | |
| 24.1 | Power of attorney (included in the signature page to this Registration Statement). | | | | | |
| 107 | Calculation of Filing Fee Tables | | | | | |

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Andover, Commonwealth of Massachusetts, on this 4th day of August, 2023.

TRANSMEDICS GROUP, INC.

By: /s/ Waleed H. Hassanein, M.D.

Name: Waleed H. Hassanein, M.D.

Title: President, Chief Executive Officer and Director

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Waleed H. Hassanein, M.D. and Stephen Gordon, and each of them acting individually, his or her true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8 to be filed by TransMedics Group, Inc., and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitutes, may lawfully do or cause to be done by virtue hereof.

* * * *

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

| Signature | Title | Date |
|-------------------------------|---|----------------|
| /s/ Waleed H. Hassanein, M.D. | President, Chief Executive Officer and Director | August 4, 2023 |
| Waleed H. Hassanein, M.D. | (Principal Executive Officer) | 0 |
| /s/ Stephen Gordon | Chief Financial Officer and Treasurer | August 4, 2023 |
| Stephen Gordon | (Principal Financial and Accounting Officer) | |
| /s/ James R. Tobin | Chairman of the Board | August 4, 2023 |
| James R. Tobin | | |
| /s/ Edward M. Basile | Director | August 4, 2023 |
| Edward M. Basile | | |
| /s/ Thomas J. Gunderson | Director | August 4, 2023 |
| Thomas J. Gunderson | | |
| /s/ Edwin M. Kania, Jr. | Director | August 4, 2023 |
| Edwin M. Kania, Jr. | | |
| /s/ Stephanie Lovell | Director | August 4, 2023 |
| Stephanie Lovell | | |
| /s/ Merilee Raines | Director | August 4, 2023 |
| Merilee Raines | | |
| /s/ David Weill, M.D. | Director | August 4, 2023 |
| David Weill, M.D. | | |
| | | |



ROPES & GRAY LLP PRUDENTIAL TOWER 800 BOYLSTON STREET BOSTON, MA 02199-3600 WWW.ROPESGRAY.COM

August 4, 2024

TransMedics Group, Inc. 200 Minuteman Road, Suite 302 Andover, MA 01810

Ladies and Gentlemen:

This opinion letter is furnished to you in connection with the registration statement on Form S-8 (the "<u>Registration Statement</u>"), filed by TransMedics Group, Inc., a Massachusetts corporation (the "<u>Company</u>"), on the date hereof, with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "<u>Securities Act</u>"), for the registration of 1,000,000 shares of common stock, no par value per share, of the Company (the "<u>Shares</u>"). The Shares are issuable under the TransMedics Group, Inc. Amended and Restated 2019 Stock Incentive Plan (the "<u>Amended and Restated Plan</u>").

We are familiar with the actions taken by the Company in connection with the adoption of the Amended and Restated Plan. We have examined such certificates, documents and records and have made such investigation of fact and such examination of law as we have deemed appropriate in order to enable us to render the opinions set forth herein. In conducting such investigation, we have relied, without independent verification, upon certificates of officers of the Company, public officials and other appropriate persons.

The opinions expressed below are limited to the Massachusetts Business Corporation Act.

Based upon and subject to the foregoing, we are of the opinion that the Shares have been duly authorized and, when the Shares have been issued and sold in accordance with the terms of the Amended and Restated Plan, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ Ropes & Gray LLP

Ropes & Gray LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of TransMedics Group, Inc. of our report dated February 27, 2023 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in TransMedics Group, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2022.

/s/ PricewaterhouseCoopers LLP Boston, Massachusetts August 4, 2023

Form S-8 (Form Type)

TransMedics Group, Inc. (Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

| Security Type | Security Class Title | Fee Calculation Rule | Amount Registered | Proposed Maximum Offering Price Per Unit | Maximum Aggregate Offering Price | Fee Rate | Amount of Registration Fee |
|------------------------|--|------------------------------|----------------------|--|-------------------------------------|------------|----------------------------------|
| Equity | TransMedics Group, Inc. Amended and Restated 2019 Stock Incentive Plan - Common Stock, no par value per share | Other - 457(c) and 457(h) | 1,000,000(2) | \$90.69(3) | \$90,690,000.00 | \$110.20 | \$9,994.04 |
| Total Offering Amounts | | | 40000(0) | \$90,690,000.00 | + | \$9,994.04 | |
| Total Fee Offsets | | | | | | | N/A |
| Net Fee Due | | | | | | | \$9,994.04 |

(1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended, this Registration Statement also covers such additional shares of common stock, no par value per share, of the Company (the "Common Stock") as may be issued to prevent dilution from stock splits, stock dividends and similar transactions.

(2) Represents 1,000,000 shares of Common Stock available for future issuance under the TransMedics Group, Inc. Amended and Restated 2019 Stock Incentive Plan as of the date of the initial filing of this Registration Statement (not including shares subject to awards granted under the Amended and Restated 2019 Stock Incentive Plan prior to the date hereof).

(3) Estimated in accordance with Rules 457(c) and (h) of the Securities Act, solely for the purpose of calculating the registration fee. The proposed maximum offering price per share of \$90.69 was computed by averaging the \$92.10 (high) and \$89.28 (low) prices of a share of the Registrant's Common Stock as reported on The Nasdaq Global Select Market on July 28, 2023.