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

Post-Effective Amendment No. 2 to FORM F-3 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

TITAN MEDICAL INC.

(Exact name of registrant as specified in its charter)

Not Applicable

(Translation of Registrant's Name into English)

Ontario, Canada
(State or other jurisdiction of incorporation)

98-0663504

(IRS Employer Identification No.)

Toronto, Ontario, M5A 2W7 Canada

(Address and telephone number of Registrant's principal executive offices)

76 Berkeley Street

C T Corporation System 1015 15th Street N.W., Suite 1000 Washington, DC 20005 (202) 572-3100

(Name, address, and telephone number of agent for service)

With a copy to:

Dorsey & Whitney LLP
James Guttman
Richard Raymer
TD Canada Trust Tower
Brookfield Place
161 Bay Street
Suite 4310
Toronto, Ontario, Canada
M5J 2S1
(416) 367-7376

Approximate date of commencement of proposed sale to the public: Not Applicable

If only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.
If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the

following box. □

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a registration statement pursuant to General Instruction I.C. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. \Box

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.C. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933.

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, 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. \Box

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

DEREGISTRATION OF UNSOLD SECURITIES

This post-effective amendment relates to Registration Statement No. 333-238830 originally filed June 1, 2020, which was amended on June 22, 2022 and was amended on a post-effective basis on March 18, 2021 (the "Registration Statement") by Titan Medical Inc. (the "Registrant") with the Securities and Exchange Commission (the "SEC") which included (a) a prospectus by the Registrant for the issuance of up to 15,116,950 common shares of the Registrant issuable upon the exercise of outstanding common share purchase warrants and (b) a prospectus for the resale by selling securityholders of up to 73,343 common shares of the Registrant upon exercise of outstanding common share purchase warrants held by the selling securityholders.

On April 3, 2023, the Registrant filed a Form 25 to report the delisting of the Shares from the NASDAQ stock exchange and to deregister the Shares under Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The Registrant intends to file a Form 15 with the SEC, requesting suspension of reporting

obligations under Section 13 and 15(d) of the Exchange Act, approximately 10 calendar days from the date hereof.

In connection with the foregoing, the Registrant has terminated any and all offerings of its securities pursuant to the Registration Statement. In accordance with an undertaking contained in the Registration Statement to remove from registration by means of this post-effective amendment any of the securities registered under the Registration Statement that remain unsold at the termination of the offering, the Registrant hereby removes from registration all of its securities registered but unsold under the Registration Statement as at the date hereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-3 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement on Form F-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Lehi, State of Utah, Country of United States on April 3, 2023.

TITAN MEDICAL INC.

By: /s/ Cary G. Vance

Name: Cary G. Vance

Title: President, Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to the Registration Statement has been signed by the following persons in the capacities indicated, on the 3rd day of April, 2023.

Signature	Title
/s/ Cary G. Vance	President, Chief Executive Officer, Director
Cary G. Vance	
/s/ Stephen Lemieux	Chief Financial Officer
Stephen Lemieux	
/s/ Paul Cataford	Chairman of the Board
Paul Cataford	
/s/ Anthony J. Giovinazzo	Director
Anthony J. Giovinazzo	
/s/ Cathy Steiner	Director
Cathy Steiner	
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AUTHORIZED REPRESENTATIVE

Pursuant to the requirements of Section 6(a) of the Securities Act of 1933, the undersigned has signed this Registration Statement, solely in the capacity of the duly authorized representative of Titan Medical Inc. in the United States, on April 3, 2023.

TITAN MEDICAL INC.

By: /s/ Cary G. Vance

Name: CARY G. VANCE

Title: President, Chief Executive Officer