

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

**Post-Effective Amendment No. 1  
FORM S-8  
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

**Titan Medical Inc.**

(Exact name of registrant as specified in its charter)

**Ontario, Canada**

(State or other jurisdiction  
of incorporation)

**98-0663504**

(IRS Employer  
Identification No.)

**76 Berkeley Street  
Toronto, Ontario, M5A 2W7  
Canada**

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

**TITAN MEDICAL INC. STOCK OPTION PLAN (AMENDED AND RESTATED EFFECTIVE AS OF OCTOBER 20, 2020)  
TITAN MEDICAL INC. DEFERRED SHARE UNIT PLAN  
TITAN MEDICAL INC. SHARE UNIT PLAN**  
(Full Title of plan)

**C T Corporation System  
1015 15<sup>th</sup> Street N.W., Suite 1000  
Washington, DC 20005**  
(Name and address of agent for service)

**(202) 572-3100**  
(Telephone number, including area code, of agent for service)

*Copies 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**

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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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.

**EXPLANATORY NOTE REGARDING DEREGISTRATION**

This post-effective amendment relates to Registration Statement No. 333-255497 filed April 26, 2021 (the "Registration Statement") by Titan Medical Inc. (the "Registrant") with the Securities and Exchange Commission (the "SEC") pertaining to the offering by the Registrant of 4,781,515 common shares of the Registrant (the "Shares"), pursuant to (i) the exercise of options under the Titan Medical Inc. Stock Option Plan, as amended and restated effective as of October 20, 2020, (ii) the exercise or settlement of awards granted under the Titan Medical Inc. Deferred Share Unit Plan effective as of May 29, 2019, and (iii) the exercise or settlement of awards granted under the Titan Medical Inc. Share Unit Plan, as amended as of February 16, 2021.

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.

1

---

### 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 S-8 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement on Form S-8 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.

<u>Signature</u>	<u>Title</u>
<u>/s/ Cary G. Vance</u> Cary G. Vance	President, Chief Executive Officer
<u>/s/ Stephen Lemieux</u> Stephen Lemieux	Chief Financial Officer
<u>/s/ Paul Cataford</u> Paul Cataford	Board Chair
<u>/s/ Anthony J. Giovinazzo</u> Anthony J. Giovinazzo	Director
<u>/s/ Cathy Steiner</u> Cathy Steiner	Director

2

---

### 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

3

---