UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of May 2022

Commission File Number: 001-38524

Titan Medical Inc.

(Exact Name of Registrant as Specified in Charter)

76 Berkely Street
Toronto, Ontario M5A 2W7
Canada
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F. Form 20- F \boxtimes Form 40- F \square

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

(Registrant)

TITAN MEDICAL INC.

Date: May 3, 2022 By: /s/ Stephen Lemieux

Name: Stephen Lemieux Title: Chief Financial Officer 99.1 News Release dated May 3, 2022

Titan Medical Announces Purchase Order from Medtronic

TORONTO--(BUSINESS WIRE)--May 3, 2022--Titan Medical Inc. (Nasdaq: TMDI; TSX: TMD), a medical device company focused on the development and commercialization of innovative surgical technologies for single access robotic-assisted surgery (RAS), today announced receipt of a \$2.6 million purchase order from Medtronic plc (NYSE: MDT), a global leader in healthcare technology.

The order covers the purchase of instruments and cameras that will be used in preclinical activities and the evaluation of Titan Medical as a potential manufacturing and supply partner for Medtronic.

"Medtronic has been a great partner for Titan since 2020 and we're excited about this opportunity to further our work together," said Paul Cataford, Interim President and CEO of Titan. "Our manufacturing team and capabilities continue to expand at our operations in Chapel Hill. With this order, we will produce instruments and cameras for Medtronic's evaluation and testing in addition to producing instruments and cameras for our own single-access RAS platform, Enos."

For clarity, these agreements are between Medtronic and Titan Medical Inc. Titan Medical is not affiliated with Titan Spine, which Medtronic acquired in 2019.

About Titan Medical

Titan Medical Inc. (Nasdaq: TMDI; TSX: TMD), a medical device company headquartered in Toronto, Ontario, with operations in Chapel Hill, North Carolina, is focused on enhancing robotic-assisted surgery (RAS) using innovative technology through a single access point. The Enos[™] robotic single access surgical system is being developed with an ergonomic focus to provide a surgical experience that imitates real-life movements that surgeons demand. The Enos system includes multi-articulating instruments designed to allow surgeons an increased range of motion in a confined space, with dexterity and the ability to exert the forces necessary to complete common surgical tasks. Titan intends to initially pursue gynecologic surgical indications with the Enos system.

Enos™ is a trademark of Titan Medical Inc.

For more information, visit www.titanmedicalinc.com and follow @TitanMedical on Twitter and LinkedIn.

Forward-Looking Statements

This news release contains "forward-looking statements" within the meaning of applicable Canadian and U.S. securities laws, which reflect the current expectations of management of the company's future growth, results of operations, performance and business prospects and opportunities. Forward-looking statements are frequently, but not always, identified by words such as "may", "would", "could", "will", "anticipate", "believe", "plan", "expect", "intend", "estimate", "potential for" and similar expressions, although these words may not be present in all forward-looking statements. Forward-looking statements that appear in this release may include, without limitation, references to: Medtronic's purchasing of instruments and cameras for pre-clinical activities and the evaluation of Titan Medical as a potential manufacturing and supply partner; the company's belief of the opportunity to further its work with Medtronic; the company's expansion of its manufacturing team and capabilities; the company's manufacturing of instruments and cameras for Medtronic's evaluation and testing; the Enos system providing a surgical experience that imitates real-life movements; and the company's intention to initially pursue gynecologic surgical indications with the Enos system. These statements reflect management's current beliefs with respect to future events and are based on information currently available to management. Forward-looking statements involve significant risks, uncertainties and assumptions. Many factors could cause the company's actual results, performance or achievements to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements, including, without limitation, those listed in the "Risk Factors" section of the company's Annual Report for the fiscal year ended December 31, 2021 which may be viewed at www.sedar.com and at www.sec.gov. Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward-looking statements prove incorrect, actual results, performance, or achievements may vary materially from those expressed or implied by the forward-looking statements contained in this news release. These factors should be considered carefully, and prospective investors should not place undue reliance on the forward-looking statements. Although the forward-looking statements contained in the news release are based upon what management currently believes to be reasonable assumptions, the company cannot assure prospective investors that actual results, performance or achievements will be consistent with these forward-looking statements. Except as required by law, the company expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

Contacts

Kristen Galfetti Vice President, Investor Relations & Corporate Communications +1-781-869-2553 investors@titanmedicalinc.com