

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 2021
Commission File Number: 001-38524

Titan Medical Inc.

(Translation of registrant's name into English)

155 University Avenue, Suite 750
Toronto, Ontario M5H 3B7
Canada

(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.
Form 20-F [] Form 40-F [X]

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.

Titan Medical Inc.
(Registrant)

Date: May 28, 2021

/s/ Monique L. Delorme
Monique L. Delorme
Chief Financial Officer

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
<u>99.1</u>	<u>Press release dated May 28, 2021</u>

Titan Medical Receives License Fee of \$10 Million Upon Achievement of Milestone Under Medtronic Development Agreement

*Completion of Second Technical Milestone
Marks Third Achievement Under Development and License Agreement*

May 28, 2021. TORONTO -- Titan Medical Inc. (Nasdaq: TMDI; TSX: TMD), a medical device company focused on the design and development of surgical technologies for robotic single access surgery, announced today that it has completed the second technical milestone under the development and license agreement with Medtronic plc (NYSE: MDT), and received a U.S. \$10 million payment for licensing the developed technologies to Medtronic.

The development and license agreement provides for the development of robotic-assisted surgical technologies for use by both Titan and Medtronic in their respective businesses. Titan retains world-wide rights to commercialize the developed technologies for use with its own Enos™ robotic single access surgical system.

“Titan has continued to work diligently to complete this milestone on time, and we share Medtronic’s drive to take on healthcare’s greatest challenges to improve lives. I am proud of our in-house R&D team and development partners that have contributed greatly to achieving this milestone,” said David McNally, president and chief executive officer of Titan. “This is a testament to the expertise and inspiration of the teams, and how great companies can work together to improve medical technology for the benefit of patients and surgeons.”

On October 26, 2020, Titan announced achievement of the first technical milestone and the completion of a non-technical financial milestone pursuant to the development agreement, with the satisfactory raising of U.S. \$18 million of capital. Under the development and license agreement, Titan would receive an additional payment of approximately U.S. \$11 million upon completing the third technical milestone, representing the fourth and final milestone.

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

About Titan Medical Inc.

Titan Medical Inc. (Nasdaq: TMDI; TSX: TMD), a medical device company headquartered in Toronto, Ontario and with R&D facilities in Chapel Hill, North Carolina, is focused on enhancing robotic assisted surgery 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, and 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. With the Enos system, Titan intends to initially pursue gynecologic surgical indications. Certain of Titan’s robotic assisted surgical technologies and related intellectual property have been licensed to Medtronic plc, while retaining world-wide rights to commercialize the technologies for use with the Enos system.

Enos™ is a trademark of Titan Medical Inc.

For more information, visit www.titanmedicalinc.com.

Forward-Looking Statements

This news release contains “forward-looking statements” within the meaning of applicable Canadian and U.S. securities laws. Such statements 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: the company’s focus on the design and development of surgical technologies for robotic single access surgery; the development and license agreement providing for the development of robotic assisted surgical technologies for use by both Titan and Medtronic; under the development and license agreement, Titan expects to receive an additional payment of approximately \$11 million upon completing Medtronic Milestone 4, the fourth and final milestone under the development and license agreement; upon completion and acceptance of the technology milestone by Medtronic and Titan’s receipt of the license payment, Medtronic will secure a world-wide license to such technologies; the company’s intention to initially pursue gynecologic surgical indications with the Enos system; and the license of certain of Titan’s robotic assisted surgical technologies and related intellectual property to Medtronic plc, while retaining world-wide rights to commercialize the technologies for use 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 Information Form and Form 40-F for the fiscal year ended December 31, 2020 (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.

Titan Medical Contact:

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

