

**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 July, 2020.

Commission File Number: **001-38524**

Titan Medical Inc.

(Exact Name of Registrant as Specified in Charter)

**155 University Avenue, Suite 750
Toronto, Ontario M5H 3B7
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 Form 40-F

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.

EXHIBIT INDEX

99.1 News Release dated July 30, 2020

Titan Medical Reports Design Enhancements to Single-Port Robotic Surgical Instruments on Product Development Resumption

TORONTO--(BUSINESS WIRE)--July 30, 2020--Titan Medical Inc. (“Titan” or the “Company”) (TSX: TMD) (Nasdaq: TMDI), a medical device company focused on the design and development of single-port robotic surgical technologies, announces that it has completed design enhancements to instruments compatible for use with its single-port robotic surgical system. As previously disclosed, the Company resumed development of instruments for its single-port robotic surgical system in June 2020 following the completion of a financing for gross proceeds of US\$18 million.

Mr. McNally, said, “We are pleased to report that based on our recent financing, we have already completed design improvements to the multi-articulating instruments and end effectors of our single-port robotic surgical system. The clinically inspired requirements for improvements resulted from data gathered during case observations and valuable surgeon feedback received during our previously announced successful preclinical studies. These design improvements are expected to enhance instrument strength and agility, efficiency of actuation, and durability for reprocessing, while reducing manufacturing costs.”

Concluding, Mr. McNally said, “We are grateful for the significant contributions of the expert team of engineers from Cambridge Design Partnership Ltd. (CDP), who continue to meet our expectations for excellence in product development, as anticipated when we announced our expanded engagement on January 6, 2020. Once financing was secured in June, CDP responded immediately to our request to expand their role. In the coming weeks, we look forward to laboratory testing prototypes of the improved instrument designs.”

About Titan Medical Inc.

Titan Medical Inc. is focused on robotic-assisted technologies for application in minimally invasive surgery (“MIS”). Titan is developing a single-port robotic surgical system comprised of a surgeon-controlled patient cart that includes a dual-view camera system with 3D and 2D high-definition vision systems and multi-articulating instruments for performing MIS procedures, and a surgeon workstation that provides an ergonomic interface to the patient cart and a 3D high-definition endoscopic view of the MIS procedure. Titan intends to initially pursue gynecologic surgical indications for use of its single-port robotic surgical system.

For more information, please visit the Company’s website at www.titanmedicalinc.com.

Forward-Looking Statements

This news release and the referenced presentation contain “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 and include statements regarding the expected instrument enhancements in view of the improved instrument designs and the Company’s planned laboratory testing of prototypes of the improved instrument designs. Wherever possible, words such as “may”, “would”, “could”, “will”, “anticipate”, “believe”, “plan”, “expect”, “intend”, “estimate”, “potential for” and similar expressions have been used to identify these forward-looking statements. 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 on Form 20F dated March 30, 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.

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