

**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 January, 2019.

Commission File Number: **001-38524**

Titan Medical Inc.

(Exact Name of Registrant as Specified in Charter)

**170 University Avenue, Suite 1000
Toronto, Ontario M5H 3B3
Canada**

(Address of principal executive offices)

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

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): X

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: January 3, 2019

By: /s/ Stephen Randall

Name: Stephen Randall

Title: Chief Financial Officer

EXHIBIT INDEX

99.1

News Release dated January 3, 2019

Titan Medical Completes Build of Its Next-Generation Single-Port Robotic Surgical System

Product enhancements video available on corporate website

TORONTO--(BUSINESS WIRE)--January 3, 2019--Titan Medical Inc. (TSX: TMD) (Nasdaq: TMDI) (“Titan” or the “Company”), a medical device company focused on the design and development of a robotic surgical system for application in minimally invasive surgery (“MIS”), announces that it has completed the system engineering confidence build for all components of its single-port robotic surgery system. This accomplishment highlights the completion of a new camera system along with the design enhancements of both the surgeon workstation and the patient cart, the two primary components of the system. The engineering confidence build reflects all significant improvements inspired by the Company’s preclinical experience. A video highlighting the system enhancements is available on the Company’s website here.

“I extend congratulations to Dr. Perry Genova, our Senior Vice President of Research and Development, and our engineering team for achieving this significant development milestone on an aggressive schedule during the fourth quarter of 2018,” said David McNally, president and chief executive officer of Titan Medical. “We are proud of their accomplishments and are thrilled with our substantial progress in 2018, and note that timely completion of this build is a critical step in preparation to file for regulatory clearances in the U.S. and the European Union. We are also grateful to the visionary surgeons who performed 45 preclinical studies with our earlier SPORT system prototype, including 14 different procedures within four surgical disciplines, providing key input to our design team. As a result, our single-port robotic system now incorporates multiple important and patent-pending enhancements specifically intended to improve surgical performance and ease of use, which will better position us in the rapidly-expanding surgical robotics market.”

Mr. McNally added, “We welcome viewers to our website where we have posted video of the SPORT system enhancements, which include a completely redesigned unique dual-camera system with a 3D high-definition steerable endoscopic camera for use during surgery, as well as a 2D high-definition wide-angle camera integrated into the camera insertion tube for visualization of instrument insertions, which also serves as a backup camera for safety. The engineering team has also designed a more compact and significantly lighter patient cart, with a reduced footprint designed to optimize portability, minimize set-up time and facilitate unencumbered assistance of surgical staff at the patient bedside. Further, we have improved the surgeon interface at the workstation with a more comfortable handle design, a new 4K monitor and upgraded haptic feedback with image overlays to assist the surgeon with the positioning of the instruments for optimal performance. We are excited to move into 2019 with this next-generation single-port robotic surgical system, with a focus on meeting our regulatory milestones.”

About Titan Medical Inc.

Titan Medical Inc. is focused on computer-assisted robotic surgical technologies for application in minimally invasive surgery. The Company is developing the SPORT Surgical System, a single-port robotic surgical system comprised of a surgeon-controlled patient cart that includes a 3D high-definition vision system and multi-articulating instruments for performing MIS procedures, and a surgeon workstation that provides an advanced ergonomic interface to the patient cart and a 3D endoscopic view inside the patient's body. Titan intends to initially pursue focused surgical indications for the SPORT Surgical System, which may include one or more of gynecologic, urologic, colorectal or general abdominal procedures.

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

Forward-Looking Statements

This news release contains "forward-looking statements" which reflect the current expectations of management of the Company's future growth, results of operations, performance and business prospects and opportunities. 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 Information Form dated March 31, 2018 (which may be viewed at www.sedar.com). 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.

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