

**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 14, 2019

By: /s/ Stephen Randall

Name: Stephen Randall

Title: Chief Financial Officer

EXHIBIT INDEX

99.1 News Release dated January 14, 2019.

Peer-Reviewed Paper Featuring Titan Medical's Single-Port Robotic Surgical Platform in General Surgery Published in *Surgical Endoscopy*

TORONTO--(BUSINESS WIRE)--January 14, 2019--Titan Medical Inc. (TSX: TMD) (Nasdaq: TMDI) ("Titan" or the "Company"), a medical device company focused on the design and development of a single-port robotic surgical system for application in minimally invasive surgery ("MIS"), announces that a peer-reviewed multi-faculty paper featuring Titan's single-port platform has been published in the January 2019 issue of *Surgical Endoscopy*. The paper highlights the feasibility, safety and ease of use of Titan's single-port robotic technology for general surgery procedures and is available here.

This European experience paper was authored by Barbara Seeliger, M.D., Michele Diana, M.D., Jacques Marescaux, M.D., FACS, FRCS and Lee Swanstrom, M.D., FACS, from IHU-Strasbourg Institute of Image-Guided Surgery in France; Jelle Ruurda, M.D., Ph.D. from University Medical Center in Utrecht, the Netherlands; and Konstantinos Konstantinidis, M.D., Ph.D., FACS from Athens Medical Center in Greece.

"We're delighted this multi-faculty paper of extensive preclinical work conducted under the guidance of internationally renowned general surgeons has been published in a well-respected, peer-reviewed surgical endoscopy journal," said David McNally, president and chief executive officer of Titan Medical. "It is exciting and validating to see the feasibility, safety and ease of use of our single-port technology demonstrated in the hands of these KOL surgeons. The feedback from this experience was instrumental in driving the system enhancements of our next-generation platform, which we announced last week. We look forward to providing this newest system to our surgeon champions in the coming months as we progress toward U.S. and EU regulatory filings later this year."

Dr. Swanstrom said, "The feasibility studies conducted at IHU Strasbourg with Titan's single-port platform demonstrated that the technology can be safely used in a wide variety of general surgery procedures. Additionally, I believe the 3D HD visualization, ergonomic interface and controls dramatically minimized the learning curve for this new technology. The IHU-Strasbourg team is pleased to be able to evaluate this enabling technology and we look forward to using it to expand the frontiers of single-port surgery."

"I am happy to be part of this multi-faculty feasibility study evaluating Titan's enabling single-port robotic platform," commented Dr. Ruurda. "Single-port robotic surgery with the right tools and capabilities like Titan's supports the natural evolution of minimally invasive surgery to fewer incisions. The study showed that a variety of general surgery procedures were completed safely, and my experience demonstrated the technology offers versatility in multi-quadrant upper GI and lower GI procedures."

Dr. Konstantinidis added, "It took me very little time to adjust to Titan's single-port platform during the evaluation of the technology. The 3D HD visualization, natural handle interface, dextrous end-effectors and highly ergonomic posture should greatly facilitate the adoption of this platform. I am very excited about the enhancements incorporated into the next-generation platform based on the feedback from our study, as there is no doubt in my mind that single-port robotic surgery is the next frontier."

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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