

---

**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 September, 2018.

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 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.

---

**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: September 6, 2018

By:           /s/ Stephen Randall          

Name: Stephen Randall

Title: Chief Financial Officer

---

**EXHIBIT INDEX**

[99.1](#) [News Release dated September 6, 2018](#)

---

## Abstract Featuring Titan Medical's SPORT Surgical System Presented at the European Association of Urology Robotic Urology Section Annual Meeting

TORONTO, Sept. 06, 2018 --Titan Medical Inc. ("Titan" or the "Company") (TSX: TMD) (Nasdaq: TMDI), a medical device company focused on the design, development and commercialization of a robotic surgical system for application in single-port minimally invasive surgery ("MIS"), announces an abstract of a pilot study featuring the use of its SPORT Surgical System in partial nephrectomy and heminephrectomy procedures was presented at the European Association of Urology Robotic Urology Section (ERUS) Annual Meeting yesterday. The abstract, titled "Single Port Robotic Partial and Hemi Nephrectomy Using A Novel Single Port Robotic Platform: Pilot Study In A Pig Model" was authored by Prof. Sebastien Crouzet, M.D., Ph.D. from the Department of Urology, University of Lyon, France and Barbara Seeliger, M.D., Research Fellow from Institute of Image Guided Surgery / IHU Strasbourg, France. The pilot study was comprised of 10 procedures in a porcine model, which demonstrated that all critical surgical tasks required for partial nephrectomy and heminephrectomy procedures were successfully completed using Titan's SPORT Surgical System, with comparable outcomes to current MIS surgical approaches and no complications. The abstract is available for viewing here (<https://titanmedicalinc.com/wp-content/uploads/2018/09/SPORT-Single-Port-Partial-Nephrectomy-Abstract-by-Crouzet-Final-Submitted.pdf>).

The 15th edition of the ERUS meeting is being held in Marseille, France from September 5-7.

"We are thrilled to announce the presentation of this pilot study abstract at the ERUS meeting featuring SPORT single-port partial nephrectomy and heminephrectomy in a preclinical setting," said David McNally, Titan's chief executive officer. "Under the expert guidance of Prof. Crouzet, the study not only demonstrated the repeatability of our single-port approach with successful completion of critical tasks, but it also produced comparable outcomes to current minimally invasive surgical approaches, and notably, multi-port robotic surgery. The repeatability, right access and demonstrated clinical value are fundamental pillars to the success and adoption of any single-port surgical approach. We are delighted that the SPORT system was able to meet the challenge successfully in these urology procedures."

"Presentation of abstracts and publication of research is important to Titan and part of a longer-term strategy to build support for the SPORT system," added Mr. McNally.

Prof. Sebastien Crouzet said, "My experience with the SPORT Surgical System was outstanding. It is exciting to see the repeatable and comparable results of single-port partial nephrectomy and heminephrectomy procedures using the SPORT system, which addresses previous limitations of single-incision approaches. It is remarkable that the data from this 10-procedure study indicate consistent Warm Ischemia Time (WIT) figures that are comparable to those associated with multi-port robotic and manual laparoscopic surgeries. Based on my significant experience with previous single-port and multi-port surgical techniques, I am very enthusiastic about the results of our pilot study with the SPORT system. I am now more confident than ever in the promise that single-port robotic technology holds for urologic surgery and potential demand from patients seeking fewer incisions, while maintaining superior clinical outcomes."

### About ERUS

ERUS is a premier meeting for urologists interested in the latest technical developments in robotic surgery and the continuous progress of urological science and practice. The meeting's aim is to educate the urological community on robotic surgical techniques with the ultimate goal of improving the level of patient care.

### About Titan

Titan Medical Inc. is focused on research and development through to the planned commercialization of 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. The SPORT Surgical System is 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](http://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. 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](http://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. 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:**

LHA Investor Relations  
Kim Sutton Golodetz  
(212) 838-3777  
kgolodetz@lhai.com  
or  
Bruce Voss  
(310) 691-7100  
bvoss@lhai.com

---