

**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 February, 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): 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: February 3, 2020

By: /s/ Stephen Randall
Name: Stephen Randall
Title: Chief Financial Officer

EXHIBIT INDEX

99.1 News Release dated February 3, 2020.

Titan Medical Issues Letter to Shareholders

TORONTO--(BUSINESS WIRE)--February 3, 2020--Titan Medical Inc. (“Titan” or the “Company”) (TSX: TMD) (Nasdaq: TMDI) 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 David McNally, President & CEO, has issued a letter to shareholders.

The full text of the letter, which also may be found on the Company’s website, follows.

February 3, 2020

Dear Titan Medical Shareholders,

As we commence 2020, I will provide you with a brief review of 2019 and outline our focus for 2020.

I am proud of our team at Titan Medical and its work over the past few months to achieve our stated fourth quarter 2019 milestones, despite an acute shortage of capital. The Titan team remains committed in our efforts to secure the capital necessary to resume product development of our single-port robotic surgical system in 2020. On behalf of my colleagues, I’d like to remind shareholders of the surgical robotics market opportunity, and what we believe will be the competitive advantages for Titan Medical.

Positioning for Market Opportunity

Ongoing market research confirms the opportunity for single-port robotic surgery, with initial clinical success being reported by surgeons using Intuitive Surgical’s da Vinci SP®, the only commercially available single-port offering, but currently with surgical indications outside our initial target area. We believe that our robotic system, having been designed from the outset with a focus on single-port surgery, may provide competitive advantages for physicians and their clinical teams, hospitals and patients. Should we be able to complete product development and achieve regulatory clearance in a timely manner, upon commercialization we expect our single-port system to expand the market for robotic surgery with attractive pricing, a reduced operating room footprint and greater portability within the hospital.

Medical-grade robotic systems designed for surgery are highly technical and complex pieces of equipment, involving medical-grade software and numerous electro-mechanical systems, precise surgical instruments and sterile interface components, all designed for instinctive use and successful surgical outcomes. To facilitate the unique design and development of our system, Titan has engaged individuals and third parties with specialized competencies for assistance with certain aspects of our system such as our innovative dual-view camera system, multi-articulating instruments and simulation training software.

Significant Financial Investment

In addition to the investment of time, the financial investment to develop our single-port system has been considerable; yet significant additional capital will be needed to fund operations through to the first commercial sale. With approximately US\$215 million in invested capital to date and projections for an additional US\$85 million to fund operations through to the filing of our 510(k) application with the U.S. Food and Drug Administration ("FDA"), we expect Titan Medical to be one of the more capital-efficient entrants to the robotic surgery market if we succeed in achieving regulatory filing with an estimated total of US\$300 million in invested capital.

Despite Titan Medical having been successful in raising capital through numerous recent public financings, including having raised US\$28 million in March 2019, like many other pre-revenue technology companies, the second half of 2019 proved to be challenging for securing additional capital. Fortunately, we commence the New Year having executed a common share purchase agreement with Aspire Capital in December, which like our common share purchase agreement with Aspire that preceded it in August, has been key to maintaining our team, satisfying creditors and continuing with the expansion of our intellectual property portfolio. The F-3 shelf registration statement with an aggregate offering amount of US\$125 million filed with the U.S. Securities and Exchange Commission that went effective in July 2019 has enabled us to execute the Aspire common share purchase agreements, in addition to its potential utility for other offerings.

Financing and Strategic Alternatives

We are grateful to the retail and institutional shareholders that have financed Titan Medical over its near 12-year history. However, as noted above, we estimate that we will require approximately US\$85 million of additional capital to complete product development and file our 510(k) application. Although the magnitude of the estimated future market opportunity is substantial, the amount of capital and the length of time required to fully develop and commercialize a competitive robotic surgical system from the current pre-clinical stage of our system, are beyond the scope of many institutional healthcare investors. These factors, combined with other constraints in the capital markets, have made it very challenging for Titan Medical to secure access to sufficient capital while attempting to minimize shareholder dilution.

The Board of Directors is actively engaged with management in seeking financing and broadly exploring strategic options. In January, the Board established a special committee of independent directors to oversee the global search for strategic alternative transactions to maximize shareholder value. The mandate of this special committee includes a wide range of potential transactions, including financing through equity or debt, licensing, merger or acquisition.

Development Status and Milestones

Product development is presently suspended while we focus on paying past due invoices owed to our valued product development, manufacturing and service providers. While pursuing financing, we have been actively engaged with our service providers in managing payables for our long-term mutual benefit. I'm pleased to report that certain key service providers have been highly supportive in this effort. If we are successful in securing sufficient financing, our planned next steps will be to restart and complete product development, proceed to product verification and validation, and submit an Investigative Device Exemption ("IDE") application to the FDA to begin human confirmatory studies. Preparation for IDE submission includes extensive planning for these studies, which is already in advanced stages having identified four hospitals and the key opinion leading surgeons who will perform the studies.

Focus on the Investment Community

We continue to communicate the Titan Medical story to members of the investment community. In 2019 we presented at seven investment conferences in both Canada and the U.S. sponsored by the investment banks BTIG, ROTH Capital Partners, Bloom Burton & Co., Wells Fargo Securities, H.C. Wainwright, Piper Sandler (formerly Piper Jaffray) and Benchmark. In addition to presenting at investment conferences and our recent fundraising effort, we embarked on several non-deal roadshows. In 2019 we met with nearly 100 members of the investment community, telling our story face-to-face to prospective investors.

We were pleased that our stock was added to the LD Micro Index in August. This index is comprised of microcap stocks, is market cap weighted and includes 996 stocks in the U.S. and Canada. This addition was another means of broadening awareness of Titan Medical among investors. Furthermore, we gained expanded visibility as a result of sell-side research coverage. Piper Sandler initiated coverage of Titan in 2019, adding to coverage previously initiated by Northland Securities and Maxim Group. We continue to communicate with these and additional sell-side analysts.

In Summary

Looking ahead, our top priority is to secure sufficient capital to resume product development and preparations for our IDE submission. In order to proceed with our plans, we must secure substantial capital to satisfy our payables, and then re-engage our product development and service provider base. In parallel and with the active support of our Board of Directors, we are considering a wide range of strategic alternatives to maximize shareholder value under our unique circumstances.

We believe that the magnitude of the market opportunity justifies the investment of substantial human and financial capital to improve patient outcomes through single-port robotic surgery. We remain committed to our search for the capital necessary to pursue our vision of delivering both patient and physician satisfaction through a product that, upon completion, we expect will be able to reduce trauma and deliver virtually scar-free surgery.

I have often said that I am proud of our team, which includes our employees, our expert consultants, development and manufacturing partners, and the surgeons who advise us. It is through their ongoing commitment, energy, guidance and teamwork that we have achieved so much. We remain grateful to you, our shareholders, who have provided the capital for our growing team to execute on our collective vision for single-port robotic surgery.

I look forward to reporting on our progress.

Sincerely,

David McNally
President & CEO

About Titan Medical Inc.

Titan Medical Inc. is focused on computer-assisted robotic surgical technologies for application in MIS. The Company 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 options 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 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 letter contains "forward-looking statements" and "forward-looking information" within the meaning of applicable Canadian and U.S. securities laws, 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, and include, without limitation, statements regarding: the surgical indications that the Company's surgical robotic system will address; the Company's expectation that its robotic surgical system will offer certain competitive advantages; Titan's belief that, if completed, its robotic surgical system will expand the market for robotic surgery; the Company's expectation that its robotic surgical system will be available at an attractive price, with a reduced operating room footprint and greater hospital portability; the features that the Company expects the commercialized version of its robotic surgical system to possess; the Company's ability to secure additional financing; the amount of additional capital required to fund operations up to and beyond the stage of commercialization; the Company's expectation of its capital efficiency on the path to commercialization vis-à-vis other market participants; the Company's ability to expand its intellectual property portfolio; the Company's capacity to complete the scheduled milestones on the path to anticipated regulatory filings; the Company's intention to complete human confirmatory studies as part of its IDE application to the FDA; the Company's submission of its IDE application and anticipated approval of such application; the Company's expected timeline for the submission of its 510(k) application with the FDA and technical file for the CE mark; the Company's expectations regarding research and development costs in the future; the Company's timeline for its transition from product development to manufacturing to product launch and planned commercialization and the ability of its employees and board members to assist with this process; the Company's engagement with members of the investment community; the Company's intended next steps to secure additional financing and, if successful, to resume product development, satisfy its payables and re-engage with its service providers; the Company's intention to consider strategic alternative transactions; the ability of the Company's robotic surgical system to deliver certain surgical outcomes. 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 29, 2019 (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 current or prospective investors that actual results, performance or achievements will be consistent with these forward-looking statements.

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