

July 9, 2019

Division of Corporation Finance
Office of Electronics and Machinery
United States Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

**Re: Responses to the Securities and Exchange Commission
Staff Comments dated July 3, 2019, regarding
Titan Medical Inc.
Draft Registration Statement on Form F-3
Submitted June 4, 2019
CIK No. 0000840551**

Dear Sir/Madam:

This letter responds to the Securities and Exchange Commission staff's (the "Staff") comments set forth in the July 3, 2019 letter regarding the above-referenced Draft Registration Statement on Form F-3. For your convenience, the staff's comments are included below and we have numbered Titan Medical Inc.'s (the "Company" or "Titan") responses accordingly.

The Company has publicly filed an updated Form F-3 concurrently with the submission of this letter. In some of the responses, the Company has changed or supplemented the disclosures in the Draft Registration Statement on Form F-3 confidentially filed on June 4, 2019. Titan is doing so in the spirit of cooperation with the Staff, and not because the Company believes its prior confidential filing was materially deficient or inaccurate. Accordingly, any changes implemented in future filings should not be taken as an admission that prior disclosures were in any way deficient. The Company may also indicate in some responses that it believes no change in disclosure is appropriate, and will have explained why.

Our responses are as follows:

[Draft Registration Statement on Form F-3 filed June 4, 2019](#)

[Fee Table, page 2](#)

Staff Comment No. 1.

Refer to the second sentence of note (1) to the fee table. Other than securities covered by the operation of Rule 416 of the Securities Act of 1933, you must specifically register the type and amount of each security you intend to register. Please confirm that your fee table will include a good faith estimate of the maximum number of shares issuable pursuant to the warrants. In addition, please revise to remove part (ii) of the footnote as you may not register an indeterminate number of unspecified types of securities.

Titan Medical Inc.'s Response:

The Company confirms the registration fee table will be prepared in accordance with Form F-3 General Instructions II.C and Rule 457(o) of the Securities Act of 1933, as amended. The Company will be unable to provide an exact amount of maximum number of shares issuable pursuant to warrants since the exact number of warrants are to be sold under the Form F-3 registration statement (the "Form F-3") will be determined at future dates based on criteria, such as sale price, that cannot currently be ascertained by the Company. As such, the Company has revised part (i) of the second sentence of note (1) to the fee table to state "an indeterminate amount of Common Shares that may be issued upon exercise of Warrants" in order to comply with the Staff's above comment. Additionally, the Form F-3 has been revised in accordance with the Staff's above comment to remove part (ii) of the footnote.

Prospectus Cover Page, page 3

Staff Comment No. 2.

We note your disclosure that your Prospectus Supplement will set forth whether the shares or warrants are being offered for cash. Refer to Form F-3 General Instructions 1.B.1 and 1.B.5 and provide us your analysis as to how your securities could be offered other than for cash or revise your disclosure as appropriate.

Titan Medical Inc.'s Response:

The securities being registered under the Form F-3 will be offered on a cash basis only. The Form F-3 has been revised to reflect the Staff's above comment and disclose that the securities are being offered only for cash.

Documents Incorporated by Reference, page 9

Staff Comment No. 3.

It appears that certain of your filing date and Material Change Report exhibit references may not reflect the correct filing dates and/or exhibits where the Material Change Reports are filed. Please review your references carefully and revise as necessary.

Titan Medical Inc.'s Response:

The Company has revised the Form F-3 to incorporate by reference the Material Change Report dated March 28, 2019 which was included as Exhibit 99.4 to the Form 6-K filed with the SEC on May 31, 2019. The Company also confirms it has reviewed its references in the "Documents Incorporated by Reference" section of the Form F-3 and revised as necessary to comply with the Staff's above comment.

There can be no assurance as to the liquidity of the trading market.... page 10

Staff Comment No. 4.

Revise your risk factor, as appropriate, to indicate whether you intend to list the units that may be offered.

Titan Medical Inc.'s Response:

The Form F-3 risk factor has been revised in accordance with the Staff's above comment to indicate that the units which may be offered are not intended to be listed.

Limitations on Ownership of Securities, page 16

Staff Comment No. 5.

Briefly indicate any limitations on the holding or voting of your shares imposed by the Investment Canada Act (Canada) that are applicable to U.S. investors.

Titan Medical Inc.'s Response:

There is no limitation imposed by the laws of Canada or by the Company's constating documents on the right of a non-resident to hold or vote the common shares, other than as provided in the *Investment Canada Act*. The following discussion summarizes the principal features of the *Investment Canada Act* for a non-resident who proposes to acquire the common shares.

The *Investment Canada Act* requires each "non-Canadian" (as defined in the *Investment Canada Act*) who acquires "control" of an existing "Canadian business", where the acquisition of control is not a reviewable transaction, to file a notification in prescribed form with the responsible federal government department or departments not later than 30 days after closing. Subject to certain exemptions, a transaction that is reviewable under the *Investment Canada Act* may not be implemented until an application for review has been filed and the responsible Minister of the federal cabinet has determined that the investment is likely to be of "net benefit to Canada" taking into account certain factors set out in the *Investment Canada Act*.

Under the *Investment Canada Act*, an investment in the Company's common shares by a non-Canadian who is a World Trade Organization member country investor that is not a state-owned enterprise, would be reviewable only if it were an investment to acquire control of the Company pursuant to the *Investment Canada Act* and the enterprise value of the Company's assets (as determined pursuant to the *Investment Canada Act* and its regulations) was equal to or greater than CAD \$1.045 billion, or CAD \$1.568 billion in the case of a "trade agreement investor". The *Investment Canada Act* contains various rules to determine if there has been an acquisition of control. For example, for purposes of determining whether an investor has acquired control of a corporation by acquiring shares, the following general rules apply, subject to certain exceptions: the acquisition of a majority of the undivided ownership interests in the voting shares of the corporation is deemed to be an acquisition of control of that corporation; the acquisition of less than a majority, but one-third or more, of the voting shares of a corporation or of an equivalent undivided ownership interest in the voting shares of the corporation is presumed to be an acquisition of control of that corporation unless it can be established that, on the acquisition, the corporation is not controlled in fact by the acquirer through the ownership of voting shares; and the acquisition of less than one third of the voting shares of a corporation or of an equivalent undivided ownership interest in the voting shares of the corporation is deemed not to be an acquisition of control of that corporation.

Under the *Investment Canada Act*, a national security review on a discretionary basis may also be undertaken by the federal government with respect to any investment by a non-Canadian to "acquire, in whole or part, or to establish an entity carrying on all or any part of its operations in Canada." No financial threshold applies to a national security review. The relevant test is whether the investment by a non-Canadian could be "injurious to national security." Review on national security grounds may occur on a pre- or post-closing basis.

Certain transactions relating to the Company's common shares will generally be exempt from the *Investment Canada Act*, subject to the federal government's prerogative to conduct a national security review, including:

- (1) the acquisition of the Company's common shares by a person in the ordinary course of that person's business as a trader or dealer in securities;
- (2) the acquisition of control of the Company in connection with the realization of security granted for a loan or other financial assistance and not for any purpose related to the provisions of the *Investment Canada Act*, and
- (3) the acquisition of control of the Company by reason of an amalgamation, merger, consolidation or corporate reorganization following which the ultimate direct or indirect control in fact of the Company, through ownership of the Company's common shares, remains unchanged.

The Company has revised the Form F-3 "Limitations on Ownership of Securities" section to reproduce this disclosure.

Use of Proceeds, page 21

Staff Comment No. 6.

Given your lack of revenues and ongoing product development costs, please revise here to discuss specifically your short and long term cash needs and related matters, such as FDA submission status and related additional milestones in connection therewith, or tell us where this is addressed in the disclosure that is incorporated by reference.

Titan Medical Inc.'s Response:

The Form F-3 "Use of Proceeds" section has been revised in accordance with the Staff's above comment to indicate Titan's milestones through to the end of the year 2020. These milestones include anticipated successful completion of prerequisite live animal and human cadaver studies early in the third quarter of 2019, and plan to file an IDE application with the FDA by the end of the third quarter of 2019. The Company also continues to target the filing of a 510(k) application with the FDA by year end 2019.

As a result of these milestones, over the course of the next two quarters, ending September 30 and December 31, 2019, Titan approximates its cash needs to be \$25.7 million and \$16.6 million respectively. The Company has targeted the fourth quarter of 2019 to file its 510(k) application with the FDA.

During the first and second quarters of 2020, the Company's investment in research and development should diminish significantly as it transitions to manufacturing and approaches commercialization. The Company approximates its cash requirements to be \$6.1 and \$3.3 million respectively in the first and second quarters of 2020, ending March 31 and June 20, 2020 respectively. These funds will be used for preparation for manufacturing and commercialization of the robotic surgical system. The Company projects receipt of FDA 510(k) clearance to occur during the third quarter of 2020, and subsequently expects to commence commercialization and have initial revenue during the third or fourth quarter of 2020.

In addition to the above disclosure, the Company has provided a more detailed outline, in the use of proceeds section of Form F-3, of the milestones it anticipates achieving during each of the third and fourth quarters of 2019.

General

Staff Comment No. 7.

Please confirm your understanding that your Form F-3 eligibility will be determined at the time of the public filing of your registration statement.

Titan Medical Inc.'s Response:

The Company confirms its understanding that the Division of Corporation Finance will determine the Company's eligibility to file the Form F-3 at such time as when the Form F-3 is publicly filed.

Staff Comment No. 8.

At the date of your initial public filing of your registration statement, please ensure that you meet the requirements of Generation Instruction 1.B.1 of Form F-3 or revise your filing to include the disclosures required by Instruction 7 to General Instruction 1.B.5 of Form F-3, as appropriate.

Titan Medical Inc.'s Response:

The Company will ensure that as of the date of its initial public filing of the Form F-3, it meets the requirements of General Instruction 1.B.1.

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Thank you for your review of the Company's Form F-3 filing. If you should have any questions regarding the response letter, please do not hesitate to contact the undersigned at 416-548-7522 (ext. 152), or James Guttman of Dorsey & Whitney LLP at (416) 367-7376.

Sincerely,

Titan Medical Inc.

/s/ Stephen Randall

Stephen Randall
Chief Financial Officer

cc: James Guttman, Dorsey & Whitney LLP