

July 30, 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 26, 2019, regarding
Titan Medical Inc.
Draft Registration Statement on Form F-3
Submitted July 25, 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 26, 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 July 25, 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 July 25, 2019](#)

[Documents Incorporated by Reference, page 9](#)

Staff Comment No. 1.

As requested by prior comment 3, please review your references carefully and revise as necessary:

- Refer to paragraph (d). It appears that your Unaudited Condensed Interim Financial Statements for the three-month period ended March 31, 2019 are included as Exhibit 99.2 to the Form 6-K filed on May 15, 2019.
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- Refer to paragraph (e). It appears that your Management Discussion and Analysis for the three-month period ended March 31, 2019 is included as Exhibit 99.3 to the Form 6-K filed on May 15, 2019.
- Refer to paragraph (f). It appears that the management information circular was included as Exhibit 99.6 to the Form 6-K filed on May 31, 2019.

Titan Medical Inc.'s Response:

The Company confirms it has reviewed its references in the "Documents Incorporated by Reference" section and revised the Form F-3 registration statement (the "Form F-3") as necessary to comply with the Staff's above comment.

Exhibit 5.1, page 29

Staff Comment No. 2.

Please file an opinion of counsel that also opines that the warrants and the units will be binding obligations of the company in accordance with Section II.B.1.f and h of Staff Legal Bulletin No. 19.

Titan Medical Inc.'s Response:

The Company confirms that an updated opinion of counsel has been filed with the Form F-3 that complies with the Staff's above comment.

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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