
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 20-F/A
(Amendment #1)**

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For fiscal year ended December 31, 2019

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report: _____

Commission file number 001-38524

Titan Medical Inc.

(Exact name of Registrant as specified in its charter)

Ontario, Canada
(Jurisdiction of incorporation or organization)

155 University Avenue, Suite 750
Toronto, Ontario M5H 3B7
Canada
(416) 548-7522
(Address of principal executive offices)

Stephen Randall
Titan Medical Inc.
155 University Avenue, Suite 750
Toronto, Ontario M5H 3B7
Canada
Tel: (416) 548-7522

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, no par value	TMDI	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: **As at December 31, 2019, 39,907,681 Common Shares of the Registrant were issued and outstanding.**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, anon-accelerated filer, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer
Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards[†] provided pursuant to Section 13(a) of the Exchange Act.

[†] The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP International Financial Reporting Standards as issued by the International Accounting Standards Board Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:

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If this is an annual report, indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Explanatory Note

This Amendment No. 1 on Form 20-F/A (the “Amendment”) amends Titan Medical Inc’s (the “Company”) Annual Report on Form 20-F for the fiscal year ended December 31, 2019 (the “Form 20-F”), as filed with the Securities and Exchange Commission on April 2, 2020, and is being filed solely to furnish the Company’s financial statements for the fiscal years ended December 31, 2018 and 2017 formatted in eXtensible Business Reporting Language (“XBRL”).

Pursuant to Rule 12b-15 promulgated under the Securities Exchange Act of 1934, as amended, we have repeated the entire text of Item 19 from the Form 20-F in this Amendment. However, there have been no changes to the text of such item other than the change stated in the immediately preceding paragraph.

This Amendment includes new certifications by our Principal Executive Officer and Principal Financial Officer pursuant to Sections 302 and 906 of the Sarbanes-Oxley Act of 2002 as exhibits 12.1, 12.2, 13.1 and 13.2 hereto.

Except as expressly set forth above, this Amendment does not, and does not purport to, amend, update or restate the information in any other item of the Form 20-F or reflect any events that have occurred after the filing of the original Form 20-F.

Item 19. Exhibits.

<u>Exhibit Number</u>	<u>Name</u>
1.1	<u>Articles of Amalgamation dated July 28, 2008 (incorporated by reference from Exhibit 3.1 to the Company's Form F-3 filed on July 30, 2019)</u>
1.2	<u>Articles of Amendment dated June 19, 2018 (incorporated by reference from Exhibit 3.2 to the Company's Form F-3 filed on July 30, 2019)</u>
1.3	<u>Amended and Restated By-Law No. 1 dated June 9, 2015 (incorporated by reference from Exhibit 3.3 to the Company's Form F-3 filed on July 30, 2019)</u>
2.1	<u>Description of the Company's Securities Registered Under Section 12 of the Securities Exchange Act of 1934*</u>
4.1	<u>Stock Option Plan*</u>
4.2	<u>Share Unit Plan*</u>
4.3	<u>Deferred Share Unit Plan*</u>
12.1	<u>Certification of the Principal Executive Officer pursuant to Rule 13a-14(a)</u>
12.2	<u>Certification of the Principal Financial Officer pursuant to Rule 13a-14(a)</u>
13.1	<u>Certificate of Principal Executive Officer pursuant to 18 U.S.C. Section 1350</u>
13.2	<u>Certificate of Principal Financial Officer pursuant to 18 U.S.C. Section 1350</u>
15.1	<u>Management's discussion and analysis of the Company for the year ended December 31, 2019*</u>
15.2	<u>Management's discussion and analysis of the Company for the year ended December 31, 2018*</u>
15.3	<u>Consent of BDO Canada LLP, Chartered Professional Accountants and Licensed Public Accountants*</u>

101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* previously filed

SIGNATURES

The Registrant hereby certifies that it meets all of the requirements for filing on Form20-F and has duly caused and authorized the undersigned to sight this Annual Report on its behalf.

Titan Medical Inc.

By: /s/ Stephen D. Randall

Name: Stephen D. Randall

Title: Chief Financial Officer and Director

Date: April 2, 2020

CERTIFICATION REQUIRED BY RULE 13a-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, David J. McNally, certify that:

1. I have reviewed this annual report on Form 20-F of Titan Medical Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;
4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and
5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditor and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: April 2, 2020

By: /s/ David J. McNally
David J. McNally
President and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION REQUIRED BY RULE 13a-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Stephen D. Randall, certify that:

1. I have reviewed this annual report on Form 20-F of Titan Medical Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;
4. The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(c) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and
5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditor and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: April 2, 2020

By: /s/ Stephen D. Randall
Stephen D. Randall
Chief Financial Officer
(Principal Financial and Accounting Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. §1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Titan Medical Inc. (the "Company") on Form20-F for the period ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David J. McNally, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in this Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

April 2, 2020

/s/ David J. McNally

David J. McNally
President and Chief Executive Officer
(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to Titan Medical Inc. and will be retained by Titan Medical Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

**CERTIFICATION PURSUANT TO
18 U.S.C. §1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Titan Medical Inc. (the "Company") on Form20-F for the period ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Stephen D. Randall, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in this Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

April 2, 2020

/s/ Stephen D. Randall

Stephen D. Randall
Chief Financial Officer
(Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906 has been provided to Titan Medical Inc. and will be retained by Titan Medical Inc. and furnished to the Securities and Exchange Commission or its staff upon request.