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 May, 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):____

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.

Exhibit 99.1 to this Report on Form 6-K will be deemed to be incorporated by reference into the Registrant's Form F-3 registration statement filed on July 30, 2019 (File No. 333-232898).

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: May 13, 2020

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

EXHIBIT INDEX

99.1	News Release dated May 13, 2020
99.2	Interim Financial Statements – March 31,2020
99.3	MD&A – March 31, 2020
99.4	Certification of interim filings - CEO
99.5	Certification of interim filings - CFO

Exhibit 99.1

Titan Medical Reports First Quarter 2020 Financial Results

TORONTO--(BUSINESS WIRE)--May 13, 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 financial results for the three months ended March 31, 2020.

All financial results are prepared in accordance with International Accounting Standards ("IAS") 34 on a basis consistent with the Company's 2019 annual financial statements and are reported in U.S. dollars, unless otherwise stated. The unaudited condensed interim financial statements and management's discussion and analysis for the period ended March 31, 2020 may be viewed at www.sedar.com and at www.sec.gov.

David McNally, President and CEO of Titan, said, "Despite the emergence of the COVID-19 pandemic during the first quarter of 2020, we have since closed three incremental financings. We completed a first registered direct offering for proceeds of approximately $1.2 million on March 27. On April 28, we received a $1.5 million senior secured loan from a leading global medical technology company, and then on May 7, we completed a second registered direct offering for $2.0 million."

Mr. McNally concluded, "We also reached an agreement with our primary product development supplier to pay off the amounts owing by the end of 2020. The supplier agreement and our recent financings are intended to position the Company to raise additional capital to satisfy our creditors and resume development of our single-port robotic surgical system."

Business highlights and achievements for the first quarter of 2020 and recent weeks include:

- On January 6, 2020, the Company and Cambridge Design Partnership Ltd. announced an expanded engagement for robotic instrument development.
- On January 27, the Company announced that it had received ISO 13485: 2003 Certification from a European Notified Body.
- On March 26, the Company announced that it had expanded and strengthened its global IP portfolio to 49 issued patents and 86 patent applications; the portfolio has since grown to 52 issued patents and 84 applications.
- On March 27, the Company announced receiving proceeds of $1.2 million from a registered direct offering of common stock and warrants, led by H.C. Wainwright & Co.
- On April 29, the Company announced a $1.5 million senior secured loan facility with a leading global medical technology company.
- On April 30, the Company announced that it had entered into a letter agreement with its primary product development supplier for the payment of outstanding payables.
- On May 7, the Company announced receiving proceeds of $2.0 million from a registered direct offering of common stock and warrants, led by H.C. Wainwright & Co.

Financial results for the three months ended March 31, 2020 include:

- Research and development ("R&D") expenses for the three months ended March 31, 2020 were $46,119, compared with R&D expenses of $14,408,612 for the corresponding prior-year period, as the Company suspended product development during the first quarter of 2020 due to insufficiency of available capital and disruption to supplier relationships.
- Net and comprehensive loss for the three months ended March 31, 2020 was $768,043, compared with a net and comprehensive loss of $28,282,880, for the three months ended March 31, 2019. In addition to reduced R&D expenses, the results for both periods include the impact of changes in the valuation of outstanding warrants.
- Cash, cash equivalents and deposits with service providers as of March 31, 2020 were $2,241,619, compared with cash, cash equivalents and deposits with service providers of $1,295,892 as of December 31, 2019. At March 31, 2020, current liabilities, excluding warrant liability were $10,210,103 compared with $11,433,967 as of December 31, 2019.

About Titan

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 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, including with respect to the use of the net proceeds of recent financings and the Company’s expanded relationship with Cambridge Design Partnership Ltd., reflect management’s current beliefs with respect to future events and are based on information currently available to management. There can be no assurance that the Company will be successful in raising additional capital necessary to satisfy its creditors, to pay its primary product development supplier as well as other suppliers and to resume development of its single-port robotic surgical system. Furthermore, as previously announced on March 30, 2020, the Company notes that its business and prospects are subject to added risks associated with and arising from COVID-19, and the uncertainty of the effects, duration and severity of the outbreak. For example, the potential effects on the Company’s product and service providers, consultants, U.S. and European regulatory authorities and investigational hospital sites is presently unknown. Titan’s previous market opportunity and growth projections are rendered unreliable given the severity of COVID-19 on the healthcare sector as well as, more broadly, on the economy and the capital markets. The Company therefore has withdrawn and disclaimed all prior disclosures and references in its annual information forms, management’s discussion and analysis, material change reports, news releases, investor presentations, letters to shareholders, prospectuses and other regulatory filings, with respect to: i) market research reports published by external market research firms; ii) market size and growth projections; iii) any and all product and service pricing estimates; iv) revenue projections; and v) market and revenue growth set forth in news releases or filings of other issuers in the robotic surgical technology sector. 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 Report for the year ended December 31, 2019 (which may be viewed at www.sedar.com and 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 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

Contact Information
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TITAN MEDICAL INC.

Unaudited Condensed Interim Financial Statements
Three Months Ended March 31, 2020 and 2019

(IN UNITED STATES DOLLARS)

TITAN MEDICAL INC.
Unaudited Condensed Interim Balance Sheets
As at March 31, 2020 and 2019
(In U.S. Dollars)

	Note	March 31, 2020	December 31, 2019
Assets			
Current Assets:			
Cash and cash equivalents		$ 1,760,219	$ 814,492
Amounts receivable		99,400	84,097
Deposits	8	481,400	481,400
Prepaid expense		180,730	369,453
Total Current Assets		$ 2,521,749	$ 1,749,442
Right of use assets - Leases	3	24,709	- 30,394
Patent Rights	4	1,649,465	- 1,601,745
Total Assets		**$ 4,195,923**	**$ 3,381,581**
Liabilities			
Current Liabilities:			
Accounts payable and accrued liabilities	5	$ 10,184,977	$ 11,412,896
Current portion of lease liability	3	25,126	21,071
Warrant liability	6	2,373,057	3,621,444
Total Current Liabilities		**$ 12,583,160**	**$ 15,055,411**
Long-term lease liability	3	$ -	$ 8,001
Total Liabilities		**$ 12,583,160**	**$ 15,063,412**
Shareholders' Equity / (Deficiency)			
Share Capital	7	$ 198,693,476	$ 194,859,415
Contributed Surplus		8,532,103	8,303,527
Deficit		(215,612,816)	(214,844,773)
Total Deficiency		**$ (8,387,237)**	**$ (11,681,831)**
Total Liabilities and Deficiency		**$ 4,195,923**	**$ 3,381,581**

Going Concern (Note 1(d))
Commitments (Note 8)
Subsequent events (Note 10)

See notes to financial statements

Approved on behalf of the Board:

"signed"	"signed"
Charles Federico	**David McNally**
Chairman	**President and CEO**

TITAN MEDICAL INC.
Unaudited Condensed Interim Statements of Net and Comprehensive Loss
For the Three Months Ended December 31, 2020 and 2019
(In U.S. Dollars)

	Note	Three Months Ended March 31, 2020	Three Months Ended March 31, 2019
Revenue:		**$ -**	**$ -**
Expenses:			
Amortization		$ 14,095	$ 6,175
Consulting fees		112,125	269,429
Stock based compensation	7b	228,576	251,357
Insurance		123,162	118,489
Management salaries and fees		541,595	648,586
Marketing and investor relations		8,644	106,189
Office and general		139,887	117,271
Professional fees		358,486	103,385
Rent		7,241	12,236
Research and Development		46,119	14,408,612
Travel		11,138	67,364
Interest charges		212,697	-
Foreign exchange (gain)		(73,503)	(107,642)
		$ 1,730,262	**$ 16,001,451**
Finance Income (cost):			
Interest		$ 1,743	$ 23,031
Gain (loss) on change in fair value of warrants	6	1,117,476	(10,476,625)
Warrant liability issue cost		(157,000)	(1,827,835)
		$ 962,219	**$ (12,281,429)**
Net and Comprehensive Loss For the Period		**$ 768,043**	**$ 28,282,880**
Basic and Diluted Loss Per Share		**$ (0.02)**	**$ (1.22)**
Weighted Average Number of Common Shares Basic and Diluted		**44,272,288**	**23,185,888**

See notes to financial statements

TITAN MEDICAL INC.
Unaudited Condensed Interim Statements of Shareholders' Equity and Deficit
For the Three Months Ended December 31, 2020 and 2019
(In U.S. Dollars)

	Note	Share Capital Number	Share Capital Amount	Contributed Surplus	Deficit	Total Equity / (Deficiency)
Balance - December 31, 2018		21,675,849	$ 170,502,394	$ 6,652,409	$ (172,937,694)	$ 4,217,109
Issued pursuant to agency agreement	7a	8,455,882	13,717,131	-	-	13,717,131
Share issue expense		-	(1,495,501)	-	-	(1,495,501)
Warrants exercised during the period	7a	1,018,506	7,002,043	-	-	7,002,043
Stock based compensation	7b	-	-	251,357	-	251,357
Net and Comprehensive loss		-	-	-	(28,282,880)	(28,282,880)
Balance - March 31, 2019		31,150,237	$ 189,726,067	$ 6,903,766	$ (201,220,574)	$ (4,590,741)
Balance - December 31, 2019		39,907,681	$ 194,859,415	$ 8,303,527	$ (214,844,773)	$ (11,681,831)
Issued pursuant to agency agreement	7a	11,909,196	3,037,204	-	-	3,037,204
Share issue expense		-	$ (214,263)	-	-	(214,263)
Warrants exercised during the period	7a	2,400,000	$ 1,011,120	-	-	1,011,120
Stock based compensation	7b	-	-	$ 228,576	-	228,576
Net and Comprehensive loss		-	-	-	$ (768,043)	(768,043)
Balance - March 31, 2020		54,216,877	$ 198,693,476	$ 8,532,103	$ (215,612,816)	$ (8,387,237)

See notes to financial statements

TITAN MEDICAL INC.
Unaudited Condensed Interim Statements of Cash Flows
For the Three Months Ended March 31, 2020 and 2019
(In U.S. Dollars)

	Note	Three Months Ended March 31, 2020	Three Months Ended March 31, 2019
		-	
Cash provided by (used in):			
Operating activities:			
Net loss for the period		$ (768,043)	$ (28,282,880)
Items not involving cash:			
		-	
Amortization		14,095	6,175
Stock based compensation	7(b)	228,576	251,357
Other share compensation		-	-
Warrant liability-fair value adjustment	6	(1,117,476)	10,476,625
Warrant liability-foreign exchange adjustment	6	(51,091)	(106,057)
Non-cash issuance costs		26,240	-
Non-cash settlement included in payables		250,574	-
Changes in non-cash working capital items:			
Amounts receivable, prepaid expenses and deposits		173,420	(1,577,929)
Accounts payable and accrued liabilities	**5**	(1,227,919)	47,756
Cash used in operating activities		$ (2,471,624)	$ (19,184,953)
Financing activities:			
Net cash proceeds from issuance of common shares and warrants		3,477,427	31,377,908
Repayment of lease liabilities	3	(3,946)	-
Cash provided by financing activities		$ 3,473,481	$ 31,377,908
Investing Activities:			
Cost of Patents		(56,130)	(53,758)
Cash used in investing activities		$ (56,130)	$ (53,758)
Increase in cash and cash equivalents		945,727	12,139,197
Cash and cash equivalents, beginning of the period		814,492	11,471,243
Cash and cash equivalents, end of the period		**$ 1,760,219**	**$ 23,610,440**
Cash and cash equivalents comprise:			
Cash		$ 1,495,982	$ 582,622
Cash equivalents		264,237	23,027,818
		$ 1,760,219	$ 23,610,440

See notes to financial statements

1. DESCRIPTION OF BUSINESS

Nature of Operations:

Titan Medical Inc.'s ("Titan" or the "Company"), business continues to be in the research and development stage and is focused on the continued research and development. In the near term, the Company will continue efforts to complete product development and proceed to pre-clinical and confirmatory human studies and satisfaction of appropriate regulatory requirements. Upon receipt of regulatory approvals, the Company will transition from the research and development stage to the commercialization stage. The completion of these latter stages will be subject to the Company receiving additional funding.

The Company is incorporated in Ontario, Canada in accordance with the Business Corporations Act. The address of the Company's corporate office and its principal place of business is Toronto, Canada.

Basis of Preparation:

(a) Statement of Compliance

These condensed interim financial statements are prepared in accordance with International Accounts Standards ("IAS") 34, Interim Financial Reporting, as issued by the International Accounting Standards Board ("IASB") on a basis consistent with the Company's 2019 annual financial statements. These condensed interim financial statements were authorized for issue by the Board of Directors on May 13, 2020.

(b) Basis of Measurement

These condensed interim financial statements have been prepared on the historical cost basis except for the revaluation of the warrant liability, which is measured at fair value.

(c) Functional and Presentation Currency

These condensed interim financial statements are presented in United States dollars ("U.S."), which is the Company's functional and presentation currency.

(d) Going Concern

These condensed interim financial statements have been prepared in accordance with accounting principles applicable to a going concern, which contemplates that the Company will be able to realize its assets and settle its liabilities in the normal course as they come due during the normal course of operations for the foreseeable future. The Company has shareholders' deficiency of $8,387,237 and losses in the current quarter of $768,043 Working capital deficiency at March 31, 2020 is $7,688,354. The Company currently does not generate any revenue and accordingly it is primarily dependent upon equity financing for any additional funding required for development and operating expenses. These conditions indicate the existence of a material uncertainty that may cast significant doubt on the ability of the Company to continue as a going concern if additional funding is not secured.

(e) Use of Estimates and Judgements

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of provisions at the date of the financial statements and the reported amount of expenses during the year. Financial statement items subject to significant judgement include the measurement of stock-based compensation and the fair value estimate of the initial measurement of new warrant liabilities and the remeasurement of unlisted warrants. While management believes that the estimates and assumptions are reasonable, actual results may differ.

1. DESCRIPTION OF BUSINESS (continued)

The Black-Scholes model used by the Company to determine fair values of stock options and warrants was developed for use in estimating the fair value of the stock options and warrants.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Warrant Liability

Certain of the Company's warrants have exercise prices that are not fixed and as such in accordance with IAS 32, they must be recorded as a derivative financial liability. This applies both in the case where the Company's warrants are denominated in a currency (Canadian dollars) other than the Company's functional currency (U.S. dollars), and when a warrant is issued with a cashless exercise option. In each case, these warrants are initially measured at fair value and subsequent changes in fair value are recorded through Net and Comprehensive Loss for the year. A proportional amount of costs associated with the issue of shares and warrants is allocated to the warrants and recorded through Net and Comprehensive Loss for the year. At each balance sheet date, the Company reviews the classification of each Warrant Liability to determine whether the appropriate classification remains with Liabilities or requires reclassification to Equity.

At each balance sheet date, the Warrant Liability of listed warrants is adjusted to fair value measured at the market price of the listed warrants and the Warrant Liability of unlisted warrants is adjusted to fair value using the Black-Scholes model. Prior to March 31, 2019, the Black-Sholes model for the unlisted warrants was determined using a comparable warrant quoted in an active market, adjusted for differences in the terms of the warrant. Since March 31, 2019, it was determined that the comparable warrant was no longer an effective benchmark and the Company began to use the market price and volatility of the Company's common shares adjusted for differences in the terms of the warrant.

(b) Fair Value Measurement

The accounting guidance for fair value measurements prioritizes the inputs used in measuring fair value into the following hierarchy:

Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 – Inputs other than quoted prices included within Level 1 that are directly or indirectly observable;

Level 3 – Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

The fair value of the warrant liability relating to listed and unlisted warrants is initially based on Level 2 significant observable inputs and at subsequent dates is adjusted using Level 1 inputs for listed warrants and Level 2 inputs for unlisted warrants.

(In U.S. Dollars)

3. LEASE ASSETS

For the three months ended March 31, 2020	Cost	Accumulated Amortization	Net Book Value
Balance at December 31, 2019	$ 34,172	$ (3,778)	$ 30,394
Additions during the period	-	-	-
Amortization in the period	-	(5,685)	(5,685)
Balance at March 31, 2020	$ 34,172	$ (9,463)	$ 24,709

The Company entered into an 18-month lease for its corporate head office in Toronto, Ontario in November 2019. The Company recognized a right-of-use asset offset by a prepayment and a lease liability in the statement of financial position, initially measured at the present value of future lease payments (net of non-lease general expenses which are expensed as incurred).

For the period ended March 31, 2020, the Company has recognized $5,685 of amortization and $4,464 in interest expense relating to this lease and has repaid $3,946 of the lease liability.

On September 4, 2019, the Company entered into a lease agreement with a third party to lease certain office space in Chapel Hill, North Carolina. The term of the lease is 62 full months and the average monthly base rent is $8,320. The lease commencement date is April 1, 2020, the date the space is ready-for-use. As of April 1, 2020, the Company will recognize a right-of-use asset and a lease liability of $442,684 relating to this lease.

4. PATENT RIGHTS

For the three months ended March 31, 2020	Cost	Accumulated Amortization & Impairment Losses	Net Book Value
Balance at December 31, 2019	$ 1,856,750	$ (255,005)	$ 1,601,745
Additions during the quarter	56,130	-	56,130
Amortization in the quarter	-	(8,410)	(8,410)
Balance at March 31, 2020	$ 1,912,880	$ (263,415)	$ 1,649,465

Balance at December 31, 2018	$ 1,398,713	$ (226,228)	$ 1,172,485
Additions during the quarter	53,758	-	53,758
Amortization in the quarter	-	(6,175)	(6,175)
Balance at March 31, 2019	$ 1,452,471	$ (232,403)	$ 1,220,068

5. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

The balance of accounts payable and accrued liabilities at March 31, 2020 is $10,184,977 (December 31, 2019 – $11,412,896). The majority of the payables relate to amounts owed to the Company's product development suppliers amounting to $9,144,666, for legal and audit an amount of $537,535 and the balance relating to regular business operations.

Naglreiter Consulting Litigation

On October 16, 2019, Naglreiter Consulting, LLC ("Naglreiter") filed a Complaint for breach of contract against the Company in the U.S. District Court for the Southern District of Florida. The Complaint, which was served on the Company on October 24, 2019, alleges that the Company has not paid the amounts owed under several invoices and, further, that the invoices total approximately $5 million.

On December 5, 2019, the Company filed an Answer, Affirmative Defenses and Counterclaim denying the allegations, asserting defenses to the Complaint, and asserting counterclaims against Naglreiter for (i) breach of contract including that the services that were rendered by Naglreiter were not rendered in a satisfactory manner and that Naglreiter failed to return property paid for by the Company, (ii) fraudulent inducement, (iii) negligent misrepresentation, (iv) indemnification and (v) conversion for refusing to return Titan's property.

On February 13, 2020, Naglreiter filed an Amended Complaint against the Company to add a complaint of unjust enrichment alleging that Naglreiter had conferred benefits on the Company without the Company paying fair market value for them and asked the courts for a constructive trust over certain property of the Company in Naglreiter's possession.

On March 9, 2020, the Company filed an Answer and Affirmative Defenses to the Amended Complaint and an Amended Counterclaim, denying the allegations, asserting defenses to the Amended Complaint, and bringing additional counterclaims of (i) replevin to recover possession of personal property held by Naglreiter, (ii) civil theft for depriving the Company of its right to certain property in Naglreiter's possession and (iii) injunctive relief to have Naglreiter cease and desist the violation of confidentiality provisions in the parties' agreements.

The Company is seeking a return of property having a value of over $4 million as well as the return of amounts paid for work not done or inadequately performed by Naglreiter. The Company intends to defend itself vigorously in this matter and pursue all relief to which it is entitled.

The Company has included in its accounts payable $2,889,626 for outstanding invoices relating to the period that Naglreiter was engaged with the Company.

6. WARRANT LIABILITY

	Three Months Ended March 31, 2020		Year Ended December 31, 2019	
	Number of Warrants	Amount	Number of Warrants	Amount
Opening Balance	21,203,411	$ 3,621,444	13,901,859	$ 11,250,167
Issue of warrants expiring, March 21, 2024	-	-	8,455,882	15,897,059
Issue of warrants expiring, March 27, 2025	3,500,000	475,300	-	-
Warrants exercised during the period	(2,400,000)	(555,120)	(1,018,506)	(3,742,824)
Warrants expired during the period	-	-	(135,824)	-
Foreign exchange adjustment during the period	-	(51,091)	-	17,687
Fair value adjustment during the period	-	(1,117,476)	-	(19,800,645)
Ending Balance	22,303,411	$ 2,373,057	21,203,411	$ 3,621,444

7. SHARE CAPITAL

a) **Authorized:** unlimited number of common shares, no par

Issued: 54,216,877 (December 31, 2019: 39,907,681)

Exercise prices of units, certain warrants and options are presented in Canadian currency when they are exercisable in Canadian dollars unless otherwise noted.

March 2020 Offering

On March 27, 2020, the Company completed an offering of securities made pursuant to an agency agreement dated March 17, 2020 between the Company and H.C.Wainwright & Co., LLC ("Wainwright") for the purchase and sale of 7,000,000 common shares of the Company (the "Common Shares") at a per share purchase price of US $0.17 per Common Share and 3,500,000 Common Share purchase warrants (each, a "Warrant"), resulting in total gross proceeds of $1,190,000 ($862,294 net of closing cash costs including cash commission described below). Each whole Warrant is exercisable to purchase one Common Share (a "Warrant Share") at an exercise price of US $0.19 per Common Share for a period of five years following the date of closing of the offering. The warrants were valued at $475,300 based on the value determined by the Black-Scholes model and the balance of $714,700 was allocated to common shares.

Pursuant to the placement agency agreement, in addition to the cash commission paid to Wainwright of $83,300, broker warrants were issued to Wainwright which entitle the holder to purchase 490,000 Common Shares at a price of US $0.2125 per share prior to expiry on March 27, 2025. The broker warrants were valued using the Black-Scholes model and the value of $65,600 was accounted for as an increase in the closing costs and allocated between the shares and the warrants.

Second Aspire Agreement

On December 23, 2019, the Company entered into a common share purchase agreement (the "Second Aspire Agreement") with Aspire Capital Fund, LLC ("Aspire Capital") whereby Aspire Capital committed to purchase up to $35 million of common shares of Titan ("Common Shares") at Titan's request from time to time, until June 23, 2022. On commencement of the Second Aspire Agreement, Titan issued to Aspire Capital 973,000 Common Shares, as consideration for entering into the Second Aspire Agreement. The value of the Common Shares issued of $423,440, was included in capital, offset by a fee of the same amount plus $35,122 for additional costs incurred.

(In U.S. Dollars)

*7. **SHARE CAPITAL (continued)***

Between January 3, 2020 and February 13, 2020, the Company issued 4,408,048 common shares pursuant to the Second Aspire Agreement as outlined in the following table:

Grant Date	Common shares issued		Value
January 3, 2020	500,000	$	219,600
January 6, 2020	500,000		229,300
January 8, 2020	400,000		195,160
January 10, 2020	500,000		247,550
January 17, 2020	600,000		303,000
January 23, 2020	600,000		295,320
February 6, 2020	600,000		282,000
February 13, 2020	708,048		300,000
	4,408,048	$	2,071,930

January 2020 Equity Transaction

On January 3, 2020, the Company announced that Cambridge Design Partnership Ltd. ("Cambridge") had subscribed for common shares of the Company. The Company issued 501,148 Common Shares at a unit price of $0.50 for satisfaction of the trade payable with Cambridge of $250,574.

First Aspire Agreement

On August 29, 2019, the Company entered into a common share purchase agreement (the "First Aspire Agreement") with Aspire Capital whereby Aspire Capital committed to purchase up to $35 million of common shares of Titan at Titan's request from time to time, until February 28, 2022. On commencement of the First Aspire Agreement, Titan immediately sold to Aspire 1,777,325 Common Shares, representing 5.3% of the Common Shares then issued and outstanding, at a price of US $1.6879 per Common Share for gross proceeds of $3.0 million and issued to Aspire Capital 639,837 Common Shares, representing 1.9% of the Common Shares then issued and outstanding, as consideration for entering into the First Aspire Agreement. Northland Securities, Inc. acted as the Company's agent and financial advisor in connection with the offering and pursuant to an agency agreement, was paid a cash fee of $160,000. Gross proceeds of $3.0 million, net of costs and fees of $417,113, was included in capital. Subsequent to August 29, 2019 and subject to the First Aspire Agreement, the Company issued Common Shares to Aspire as outlined in the following table:

(In U.S. Dollars)

*7. **SHARE CAPITAL (continued)***

Grant Date	Common shares issued		Value
August 30, 2019	2,417,162	$	3,000,000
November 8, 2019	100,000		42,560
November 8, 2019	100,000		42,560
November 12, 2019	100,000		42,970
November 12, 2019	100,000		42,000
November 13, 2019	100,000		42,970
November 14, 2019	300,000		128,910
November 15, 2019	2,500,000		1,074,250
November 19, 2019	2,067,282		888,311
	7,784,444	$	5,304,531

March 2019 Equity Offering

On March 21, 2019, Titan completed an offering of securities made pursuant to an agency agreement dated March 18, 2019 between the Company and Bloom Burton Securities Inc. ("Bloom Burton"). The Company sold 8,455,882 units under the offering at a price of US $3.40 per Unit for gross proceeds of approximately $28,750,000 ($25,426,744 net of closing cost including cash commission of $2,012,500). Each unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of US $4.00 and expiring March 21, 2024. The warrants were valued at $15,897,059 based on the value determined by the Black-Scholes model and the balance of $12,852,941 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to Bloom Burton, broker warrants were issued to Bloom Burton which entitle the holder to purchase 591,911 Common Shares at a price of US $3.40 per share prior to expiry on March 21, 2021. The broker warrants were valued using the Black-Scholes model and the value of $864,190 was accounted for as an increase in the closing costs and allocated between the shares and the warrants.

During the quarter ended March 31, 2019, 1,018,506 warrants were exercised for total proceeds of $3,259,219. The fair value of the exercised warrants was $3,742,824 which was reclassed from warrant liability to common stock. No additional warrants were exercised during 2019.

b) Stock Options and Compensation Options

Titan has reserved and set aside up to 15% of the issued and outstanding shares of Titan for granting of options to employees, officers, consultants and advisors. At March 31, 2020, 6,859,600 common shares (December 31, 2019: 5,986,152) were available for issue in accordance with the Company's stock option plan. The terms of these options are determined by the Board of Directors.

(In U.S. Dollars)

7. SHARE CAPITAL (continued)

On January 28, 2020, the Company issued 25,765 stock options with an exercise price of CDN $0.657 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years.

For the three months ended March 31,2020, $228,576 of stock-compensation was recorded (2019 – $251,357).

A summary of the status of the Company's outstanding stock options as of March 31, 2020 and December 31, 2019 and changes during the periods ended on those dates is presented in the following table:

Stock Options – CDN $ denominated

	Three months ended March 31, 2020		Year Ended December 31, 2019	
	Number of Stock Options[1]	Weighted average Exercise Price (CDN)	Number of Stock Options[1]	Weighted average Exercise Price (CDN)
Balance Beginning	860,379	$ 5.89	875,433	$ 18.20
Granted	25,765	0.66	35,719	4.54
Expired/Forfeited	-	-	(50,773)	31.79
Balance Ending	886,144	$ 5.74	860,379	$ 5.89

Stock Options – US $ denominated

	Three months ended March 31, 2020		Year Ended December 31, 2019	
	Number of Stock Options	Weighted average Exercise Price (USD)	Number of Stock Options	Weighted average Exercise Price (USD)
Balance Beginning	854,042	$ 2.65	50,349	$ 1.55
Granted	-	-	843,693	2.72
Expired/Forfeited	(467,255)	2.20	(40,000)	3.72
Balance Ending	386,787	$ 3.19	854,042	$ 2.65

1. After giving consideration for 30:1 share consolidation effected June 20, 2018.

(In U.S. Dollars)

*7. **SHARE CAPITAL (continued)***

The weighted-average remaining contractual life and weighted-average exercise price of options outstanding and of options exercisable as at March 31, 2020 are as follows:

Canadian Dollar Denominated Options

Exercise Price (CDN)	Number Outstanding	Weighted-average remaining contractual life (years)	Options Exercisable
$0.66	25,765	6.83	25,765
$3.28	31,498	5.42	31,498
$4.50	18,936	3.03	18,936
$4.54	743,122	3.99	370,354
$4.80	3,040	0.46	3,040
$7.49	5,590	5.27	5,590
$9.00	11,481	5.27	11,481
$9.60	1,105	0.52	1,105
$11.70	6,667	0.69	6,667
$12.00	1,948	0.68	1,948
$30.00	28,260	1.40	28,260
$30.60	2,096	0.73	2,096
$32.40	810	0.83	810
$45.30	560	0.36	560
$51.60	5,266	0.19	5,268
	886,144	**3.96**	**513,378**

US Dollar Denominated Options

Exercise Price (USD)	Number Outstanding	Weighted-average remaining contractual life (years)	Options Exercisable
$1.55	50,349	1.72	50,349
$2.20	2,165	2.30	2,165
$3.40	294,273	6.12	197,273
$3.72	40,000	2.44	-
	386,787	**5.14**	**249,787**
Total	**1,272,931**	**4.32**	**763,165**

The weighted average exercise price of Canadian dollar denominated options outstanding is CDN $5.74 and CDN $6.61 for options that are exercisable. The weighted average exercise price of US dollar denominated options outstanding is US $3.19 and US $3.02 for options that are exercisable.

(In U.S. Dollars)

7. SHARE CAPITAL (continued)

Options are granted to Directors, Officers, Employees and Consultants at various times. Options are to be settled by physical delivery of shares.

Inputs for Measurement of Grant Date Fair Values

The grant date fair value of all share-based payment plans was measured based on the Black-Scholes model. Expected volatility was estimated by considering historic average share price volatility. The weighted average inputs in the original currency of the grants (CDN$ or US$) used in the measurement of fair values at grant date of the share-based option grants for the three months ended March 31, 2020 and 2019 are as follows:

	2020 - CDN	2019 – US
Fair Value calculated	CDN $0.43	-
Share price at grant	CDN $.62	-
Exercise price	CDN $0.66	-
Expected Option Life	3.5 years	-
Risk free interest rate (based on government bonds)	1.41%	-
Expected Volatility	109.00%	-
Expected dividends	Nil	-

c) Warrants

In addition to the warrants accounted for as a liability (see Note 5), at March 31, 2020, the Company has 1,709,276 broker warrants that are issued, outstanding and exercisable (December 31, 2019 - 1,219,276). These broker warrants expire between April 10, 2020 and March 27, 2025 (December 31, 2018 - broker warrants had expiry dates between April 10, 2020 and March 21,2021).

8. COMMITMENTS

As part of its program of research and development around the single-port robotic surgical system, the Company has outsourced certain aspects of the design and development to third party technology and development companies. At March 31, 2020, $1,305,910 in purchase orders remain outstanding (December 31, 2019 - $ 1,327,294), however work relating to these commitments is currently delayed pending additional funding and the ramp up in the Company's development projects. The Company also has on deposit with a U.S. supplier $481,400 to be applied against future invoices (December 31, 2019 - $481,400).

9. RELATED PARTY TRANSACTIONS

During the three months ended March 31, 2020, transactions between the Company's directors, officers and other related parties were related to compensation matters in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

(In U.S. Dollars)

9. RELATED PARTY TRANSACTIONS (continued)

Compensation paid to Executive Officers for the three months ended March 31, 2020 amounted to $186,401 compared to $514,252 for the three months ended March 31, 2019.

	March 31, 2020		December 31, 2019	
	Number of Shares	**%**	**Number of Shares**	**%**
John Barker	32,714	0.06	32,714	0.08
Stephen Randall	22,993	0.04	22,993	0.06
David McNally	4,167	0.01	4,167	0.01
John Schellhorn	294	0.00	294	0.00
Total	**60,168**	**0.11**	**60,168**	**0.15**
Common Shares Outstanding	**54,216,877**	**100%**	**39,907,681**	**100%**

10. SUBSEQUENT EVENTS

Senior Secured Loan from Global Medical Technology Company

On April 28, 2020, the Company issued an 8% $1.5 million senior secured promissory note ("Note") to a leading global medical technology company (the "Corporate Lender") and executed and delivered a security agreement (the "Security Agreement") in favor of the Corporate Lender. The Note matures on April 28, 2023 and the unpaid principal balance owing under the Note, together with any accrued and unpaid interest and all other unpaid obligations under the Note, shall be due and payable in full on the earliest to occur of: (i) April 28, 2023, (ii) a Change of Control (as defined in the Note), or (iii) a Qualified Financing (as defined in the Note) subject to an accelerated due date under certain adverse conditions.

The Security Agreement grants a security interest in all of our present and future property including all personal property, inventory, equipment and intellectual property to the Corporate Lender. In addition, the Corporate Lender's rights and powers include without limitation (a) exercising and enforcing all rights and remedies of a holder of collateral as if the Corporate Lender were the absolute owner of the collateral, (b) collection of any proceeds arising in respect of all of our property pledged as security for the loan, (c) license or sublicense, whether on an exclusive or nonexclusive basis, of any of our intellectual property for such term and on such conditions and in such manner as the Corporate Lender in its sole judgment determines (taking into account such provisions as may be necessary to protect and preserve such intellectual property), and (d) the right to enforce its security in the event of a default which may include the appointment of a receiver by instrument or order of the court.

The Company intends to use the proceeds of the Note for general corporate purposes while seeking additional financing to meet longer-term capital needs to support the development of its single-port robotic surgical system, instruments and accessories; and funding working capital (including the reduction of outstanding payables).

Warrants Exercised

Subsequent to March 31, 2020, 200,000 warrants were exercised for gross proceeds of $38,000.

10. SUBSEQUENT EVENTS (contined)

May 2020 Financing

On May 6, 2020, the Company completed a registered direct offering of securities made pursuant to an agency agreement dated March 17, 2020 between the Company and H.C.Wainwright & Co., LLC ("Wainwright") that provide for the purchase and sale of 5,514,504 common shares of the Company (the "Common Shares") at a per share purchase price of US $0.36268 per Common Share and 2,757,252 unregistered Common Share purchase warrants (each, a "Warrant"), resulting in total gross proceeds of $2,000,000 ($1,613,800 net of estimated closing cash costs including cash commission described below). Each Warrant is exercisable to purchase one Common Share (a "Warrant Share") at an exercise price of US $0.3002 per Common Share for a period of five and one-half (5.5) years following the date of closing of the offering.

Pursuant to the placement agency agreement, in addition to the cash commission paid to Wainwright of $140,000, broker warrants were issued to Wainwright which entitle the holder to purchase 386,015 Common Shares at a price of US $0.45335 per share prior to expiry on November 6, 2025.

COVID-19

Since December 31, 2019, the outbreak of the novel strain of coronavirus, specifically identified as "COVID-19", has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and social distancing, continue to cause material disruption to business globally resulting in an economic slowdown. Global equity markets have experienced significant volatility and weakness. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The duration and impact of the COVID-19 outbreak is unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on the financial results and condition of the Company in future periods.

TITAN MEDICAL INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE THREE MONTHS ENDED MARCH 31, 2020

(IN UNITED STATES DOLLARS)

This Management's Discussion and Analysis ("MD&A") is dated May 13, 2020.

This MD&A provides a review of the performance of Titan Medical Inc. ("Titan" or the "Company") and should be read in conjunction with its unaudited condensed interim financial statements for the three months ended March 31, 2020 (and the notes thereto) (the "Interim Financial Statements") and the annual audited financial statements for the years ended December 31, 2019 and 2018. The Interim Financial Statements have been prepared in accordance with International Financial Reporting Standards 34, Interim Financial Reporting ("IAS 34"). All financial figures are in United States Dollars except where otherwise noted.

Internal Control over Financial Reporting

During the three months ended March 31, 2020, no changes were made to the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Forward-Looking Statements

This discussion includes certain statements that may be deemed "forward-looking statements". All statements in this discussion other than statements of historical facts that address future events, developments or transactions that the Company expects, are forward-looking statements. These forward-looking statements are made as of the date of this MD&A. Forward-looking statements are frequently, but not always, identified by words such as "expect", "anticipate", "estimate", "may", "could", "might", "will", "would", "should", "intend", "believe", "target", "budget", "plan", "strategy", "goals", "objectives", "predicts"; "potential", "projects", "possible", "milestones", "projection" or the negative of any of these words and similar expressions are intended to identify forward-looking statements, although these words may not be present in all forward-looking statements. Forward-looking statements that may appear in this MD&A include statements concerning:

- the Company's need to raise additional capital in order to resume product development and regulatory activities at a pace that would allow accomplishment of its previously stated milestones;
- the Company's business plan consists of the development of computer-assisted robotic surgical technologies for application in MIS comprising its single-port robotic surgical system;
- the Company is planning continued development of a comprehensive training curriculum and post-training assessment tools for surgeons and surgical teams;

- the proposed training curriculum is planned to include cognitive pre-training, psychomotor skills training, surgery simulations, live animal and human cadaver lab training, surgical team training, troubleshooting and an overview of safety;
- the Company's intent to initially pursue gynecologic surgical indications for use of its single-port robotic surgical system;
- the single-port robotic surgical system patient cart is being developed to deliver multi-articulating instruments and 3D high definition vision system into the patient's body cavity through a single access port;
- the Company's technology and research and development objectives and milestones, including any estimated costs, schedules for completion and probability of success and including without limitation the table set forth herein under the heading, "Current Development Plan" and the footnotes thereunder;
- the Company's intention with respect to updating any forward-looking statement after the date on which such statement is made or to reflect the occurrence of unanticipated events;
- the Company's expectation with respect to submitting its Investigational Device Exemption ("IDE") application to the U.S. Food and Drug Administration ("FDA") in a timely manner;
- the Company's plan to produce the appropriate preclinical and clinical data required for a 510(k) application to the FDA, and Technical File for the CE mark;
- the Company's plans to develop its single-port robotic surgical system and the estimated incremental costs (including the status, cost and timing of achieving the development and regulatory milestones disclosed herein);
- the Company's intention to continue to assess specialized skill and knowledge requirements and recruitment of qualified personnel and partners;
- the anticipated market for securities issuable under any offering and the Company's intended use of proceeds of any offering of securities;
- the Company's continuing efforts to secure its intellectual property by filing patent applications;
- the Company's expectations with respect to its relationship with its Primary Supplier (as defined herein), including its ability to comply with the terms of agreements between the Company and the Primary Supplier;
- the mandate of the special committee of the Company's board of directors includes a wide range of potential transactions, including financing through equity or debt, licensing, merger or acquisition and to oversee the global search for strategic alternative transactions to maximize shareholder value;
- should the Company be successful in raising sufficient capital, which it may not be, the Company's plans to complete paying valid past due invoices and then to develop a work plan with input from suppliers that is consistent with the Company's priorities toward milestone achievement having regard to the Company's available capital resources;

- the performance of human surgeries with the single-port robotic surgical system requiring an IDE from the FDA, which must be submitted and approved in advance;
- the recruitment of surgeons from multiple hospital sites being necessary to perform the surgeries and each of these sites requiring approval of their independent Institutional Review Board to approve the studies;
- previous results achieved by surgeons in preclinical studies in operating prototypes in animal and cadaver studies validating the potential for single incision surgeries to be performed with the Company's single-port robotic surgical system;
- insights gained from these preclinical studies directing the Company to make further product improvements;
- the ability of the Company to build a patent portfolio that will demonstrate and support the novelty of the Company's unique single-port technology;
- subject to securing sufficient funding, the Company's plan to pay the Primary Supplier in full satisfaction of the outstanding payables by the end of the current calendar year; and
- the Company's intended use of the proceeds from the senior secured loan (as defined herein).

Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Forward-looking statements are statements about the future and are inherently uncertain, and actual results of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, such as access to sufficient capital on a timely basis, reliance on third party suppliers, commercial disputes with third party suppliers, current global financial conditions, dependence on key personnel or management, dependence on third party contract development or manufacturing service providers, conflicts of interest, dependency on additional financing, the Company's history of losses, reliance on strategic alliances, the ability to retain key personnel in a highly-competitive employment environment, the possibility of the Company's inability to augment its management team when required, the possibility that the Company's trade secrets and confidential information may be compromised, reliance on third parties for important aspects of the Company's business, uncertainty as to product development and commercialization milestones, results of operations, competition, technological advancements, rapidly changing markets, uncertain market for the Company's products and technology, uncertainty as to the enforceability of the Company's intellectual property, infringement of intellectual property rights of others, scope and cost of insurance and uninsured risks, risks associated with the Company entering into additional long-term contractual arrangements, ability to license other intellectual property rights, government regulation, changes in market conditions and demands and preferences, changes in government policy, exposure to product liability claims, changes in accounting and tax rules, regulatory inquiries, requirements and approvals, contingent liabilities, manufacturing and product defects, stock price volatility, fluctuating financial results and currency fluctuations, uncertainty as to the Company's ability to meet its development and commercialization milestones, uncertainties as to development and manufacturing of a commercially viable product, reliance on external suppliers and development firms, fluctuations in the market prices of the Company's securities, possible future sales by the Company's shareholders of their securities, limited operating history of the Company, the development stage of the Company and its lack of revenue or earnings, fluctuations of the Company's financial results, the possibility that the Company is not able to maintain its "foreign private issuer" status, the possibility of delisting from the Nasdaq or TSX exchanges, risks related to our working capital deficiency, risks related to a senior secured loan from a global medical technology company, risks related to our ability to resolve outstanding Naglreiter litigation, the negative impact of COVID-19 on the ability of suppliers of goods and services to provide resources in a timely manner to support the Company's milestones, the negative impact of COVID-19 on present and future demand for robotic surgeries, equipment and supplies, and the negative impact of COVID-19 on the ability of the Company to obtain regulatory approvals as required on a timely basis to accomplish its milestones and objectives.

Please also refer to the risk factors set forth starting on page 10 of the Company's Annual Information Form for the 2019 fiscal year, available on SEDAR at www.sedar.com, which are expressly incorporated by reference into this MD&A.

There may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Other than as specifically required by law, the Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made, or to reflect the occurrence of unanticipated events, whether as a result of new information, future events or results or otherwise. Investors are cautioned that any such statements are not guarantees of future performance and that actual results or developments may differ materially from those projected in the forward-looking statements. Accordingly, investors should not place undue reliance on forward-looking statements.

History and Business

The Company is the successor corporation formed pursuant to two separate amalgamations under the *Business Corporations Act* (Ontario) on July 28, 2008. The Company does not have any subsidiaries.

The address of the Company's corporate office and its principal place of business is 155 University Avenue, Suite 750, Toronto, Ontario, Canada M5H 3B7.

Overall Performance

During the three months ended March 31, 2020, the Company was successful in securing sufficient capital to maintain limited operations but will require additional capital in order to resume product development and regulatory activities at a pace that would allow accomplishment of its previously stated milestones. The Company has a working capital deficiency of $7,688,354 at March 31, 2020. The Company does not have sufficient capital to continue the development of its robotic surgical system and there can be no assurance that the Company will be successful in securing additional financing. All statements in this MD&A as to the plans and objectives of the Company with regard to resuming and continuing its development are conditional upon, among other things, the Company raising sufficient financing on a timely basis, securing and restoring relationships with its suppliers and development partners and retaining qualified personnel.

During the three months ended March 31, 2020, the Company raised aggregate gross proceeds of approximately $3,717,930 from financings ($3,346,667 net of closing costs including cash commission of $83,300), including $456,000 from the exercise of warrants. See the section below on Financings for more details. During the three months ended March 31, 2020, the Company generated a net and comprehensive loss of $768,043 compared to a loss of $28,282,880 during the three months ended March 31, 2019. Included in net and comprehensive losses were research and development expenditures of $46,119 during the three months ended March 31, 2020, compared to $14,408,612 for the three months ended March 31, 2019, and a gain on change in fair value of warrants of $1,117,476 during the three months ended March 31, 2020, compared with a loss on change in fair value of warrants of $10,476,625 during the three months ended March 31, 2019.

The Company's business plan consists of the development of computer-assisted robotic surgical technologies for application in minimally invasive surgery ("MIS") comprising its single-port robotic surgical system. The system under development includes 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 the surgeon with an ergonomic interface to the patient cart including a 3D endoscopic view of the MIS procedure. The Company intends to initially pursue gynecologic surgical indications for use of its single-port robotic surgical system.

Development of the single-port robotic surgical system proceeded with input from surgeons and operating room staff experienced in laparoscopic and robotic MIS, input from the Company's Surgeon Advisory Board (the "Surgeon Advisory Board") comprised of surgeons who specialize in MIS, and through the engagement of specialized medical technology development firms. This approach allowed the Company to design a robotic surgical system intended to include the traditional advantages of robotic surgery, including 3D stereoscopic imaging and instinctive control (lost in manual laparoscopic procedures), as well as new and enhanced features, including an open-concept surgeon workstation incorporating a 3D high definition display providing an ergonomically friendly user interface and a patient cart with enhanced instrument dexterity and visualization.

The single-port robotic surgical system patient cart is directed at delivering multi-articulating instruments and a dual-view camera system into a patient's abdominal body cavity through a single access port. The dual-view camera system consists of a primary 3D high-definition flexible endoscopic camera and a secondary 2D high-definition camera integrated with an insertion tube of approximately 25 millimeter diameter that facilitates insertion of the primary camera and multi-articulating instruments to the surgical site. Upon insertion of the insertion tube through the single access port, the integrated secondary camera is configured to provide visualization for optimal positioning of the camera insertion tube by a bedside assistant under the guidance of the surgeon. Once the insertion tube is satisfactorily positioned, it may be docked to the central unit of the patient cart, facilitating the deployment of the primary camera and control of the multi-articulating instruments by the surgeon via the workstation. The reusable multi-articulating instruments, that each include an assortment of end effectors, may be cleaned and sterilized between surgeries (for a set number of uses). The general patient cart architecture is expected to provide configurability for a variety of surgical indications and the ability to be maneuvered within the operating room, or redeployed within hospitals and ambulatory surgical centers, where applicable.

As part of the development of the robotic surgical system, the Company is planning to release a comprehensive training curriculum and post-training assessment tools for surgeons and surgical teams. The training curriculum is planned to include cognitive pre-training, psychomotor skills training, surgery simulations, live animal and human cadaver lab training, surgical team training, troubleshooting and provide a safety overview. The Company has preliminarily developed fourteen core surgical skills simulation modules for use with the surgeon workstation in the first phase of the comprehensive surgeon training curriculum that is planned for its single-port robotic surgical system.

The Company has continuously evaluated its technologies under development for intellectual property protection through a combination of trade secrets and patent application filings. The Company has focused on building a patent portfolio that management believes will demonstrate and support the novelty of its unique single-port technology. The Company has experienced a significant growth of its patent portfolio from 12 issued patents at December 31, 2016 to 50 issued patents as of March 31, 2020. As of May 13, 2020, the Company has 52 patents and 84 patent applications.

As part of its development efforts, the Company has established certain milestones related to technology and design advancements, preclinical and clinical studies and completion of regulatory submissions. To assess progress, the Company regularly tests and evaluates its technology. If such evaluations indicate technical defects or failure to meet cost or performance goals, the Company's development schedule could be further delayed.

In addition to being capital intensive, research and development activities relating to the sophisticated technologies that the Company is developing are inherently uncertain as to future success and the achievement of desired results. If delays or problems occur during the Company's ongoing research and development activities, important financial and human resources may need to be diverted toward resolving such delays or problems. Further, there is material risk that the Company's research and development activities may not result in a functional product or one that is clinically adopted, and that the capital required to continue development may not be available to the Company.

During the year ended December 31, 2019, the Company initiated preclinical acute and chronic (survival) live animal and human cadaver procedures according to Good Laboratory Practices ("GLP") during the second quarter of 2019. Human factors evaluation ("HFE") studies that were previously planned for the second quarter of 2019 were moved to the third quarter and were completed along with the GLP procedures, during the third quarter of 2019.

During the fourth quarter ended December 31, 2019, the Company completed two of its three fourth quarter milestones including: (i) receipt of a final independent report from validation testing of system safety and usability for the intended users and use environments under simulated robotic manipulation exercises intended to replicate essential surgical tasks; and (ii) completion of a user manual for robotic system setup by operating room staff and surgeon operation of the surgeon workstation, patient cart, instruments and accessories. The third milestone, receipt of ISO 13485 Certification, was expected to be received by year-end 2019, but was received January 24, 2020.

The future success of the Company is substantially dependent on funding its research and development program and maintaining the support of its research and development and manufacturing service providers and, in some cases, securing new suppliers and service providers.

Recent Activities

The Company's primary product development supplier (the "Primary Supplier") suspended all work with regard to the development of the Company's robotic surgical system during the fourth quarter of 2019 and through the first quarter of 2020, pending receipt of sufficient funds. However, as of April 30, 2020, the Company has reached an agreement with the Primary Supplier for the payment of outstanding payables to the Primary Supplier and for the resumption of development services (the "Primary Supplier Agreement"). The Company will need to raise additional capital in order to fund the payment of outstanding payables to the Primary Supplier and for the resumption of development services.

Since late 2019, the Company has been involved in litigation with Naglreiter Consulting, LLC ("Naglreiter"). Naglreiter had been engaged by the Company to develop devices associated with the Company's robotic surgical system, in particular, focusing on aspects of the instrumentation and the camera system. Prior to commencement of litigation, discussions were under way between the parties to negotiate appropriate arrangements with regard to the scope of work, timing, fees for services and other terms and conditions. However, on October 4, 2019, the Company received a demand letter for payment of all amounts Naglreiter believed it was owed by the Company (the "Service Provider Demand Letter"). On October 11, 2019, the Company issued a response declining the terms of the demands set out in the Service Provider Demand Letter (the "Company Response Letter"). Pursuant to the Company Response Letter, the Company requested that the service provider cease all work on behalf of the Company.

On October 16, 2019, Naglreiter filed a Complaint for breach of contract against the Company in the U.S. District Court for the Southern District of Florida. The Complaint, which was served on the Company on October 24, 2019, alleges that the Company has not paid the amounts owed under several invoices and, further, that the invoices total approximately $5 million.

On December 5, 2019, the Company filed an Answer, Affirmative Defenses and Counterclaim denying the allegations, asserting defenses to the Complaint, and asserting counterclaims against Naglreiter for (i) breach of contract including that the services that were rendered by Naglreiter were not rendered in a satisfactory manner and that Naglreiter failed to return property paid for by the Company, (ii) fraudulent inducement, (iii) negligent misrepresentation, (iv) indemnification and (v) conversion for refusing to return Titan's property.

On February 13, 2020, Naglreiter filed an Amended Complaint against the Company to add a complaint of unjust enrichment alleging that Naglreiter had conferred benefits on the Company without the Company paying fair market value for them and asked the courts for a constructive trust over certain property of the Company in Naglreiter's possession.

On March 9, 2020, the Company filed an Answer and Affirmative Defenses to the Amended Complaint and an Amended Counterclaim, denying the allegations, asserting defenses to the Amended Complaint, and bringing additional counterclaims of (i) replevin to recover possession of personal property held by Naglreiter, (ii) civil theft for depriving the Company of its right to certain property in Naglreiter's possession and (iii) injunctive relief to have Naglreiter cease and desist the violation of confidentiality provisions in the parties' agreements.

The Company is seeking a return of property having a value of over $4 million as well as the return of amounts paid for work not done or inadequately done by Naglreiter. Although the Company intends to defend itself vigorously in this matter and pursue all relief to which it is entitled, there is no assurance that the Company will be successful in defending against the complaints or in its counterclaims against Naglreiter.

As the Company raises additional capital, it continues to make payments to suppliers other than Naglreither on valid past due invoices. Should the Company be successful in raising sufficient capital, the Company plans to complete paying valid past due invoices from suppliers other than Naglreiter and develop a work plan with input from suppliers that is consistent with the Company's priorities toward milestone achievement having regard to the Company's available capital resources. In any case in which the Company may be unable to normalize or otherwise proceed with supplier relationships, it has identified alternative suppliers of those services. The engagement of any alternative service providers will be subject to the availability of sufficient capital, successful negotiation of commercial terms, statements of work, payment terms and possibly, require deposits and/or pre-payments. There is no assurance that the Company will be able to reach any agreement with any alternative supplier on satisfactory terms.

In 2019, the Company's Board of Directors established a special committee of independent directors to oversee the global search for strategic alternative transactions. The mandate of the special committee includes a wide range of potential transactions, including financing through equity or debt, licensing, merger or acquisition.

During the three months ended March 31, 2020, the Company raised aggregate gross proceeds of approximately $3,717,930 from financings ($3,346,667 net of closing costs including cash commission of $83,300), including from the exercise of warrants. There can be no assurance that the Company will be successful in securing sufficient capital or completing a suitable strategic alternative transaction. In the event that the Company is unable to secure additional capital or conclude a suitable strategic alternative transaction, it may be unable to pay down past due invoices or restart product development. It is also possible that in such circumstances the Company's relationships with key service providers may further deteriorate.

Summary of Quarterly Results

The following is selected financial data for each of the eight most recently completed quarters, derived from the Company's financial statements and calculated in accordance with IFRS. Net and Comprehensive Loss (gain) from operations figures include the effects of adjustments in the valuation of outstanding warrant liability. Basic and diluted loss per share figures are calculated on the basis of the 30:1 consolidation of common shares of the Company ("Common Shares"), which was completed in June 2018.

	Three Months Ended March 31, 2020	**Three Months Ended December 31, 2019**	**Three Months Ended September 30, 2019**	**Three Months Ended June 30, 2019**	**Three Months Ended March 31, 2019**	**Three Months Ended December 31, 2018**	**Three Months Ended September 30, 2018**	**Three Months Ended June 30, 2018**
Net sales	-	-	-	-	-	-	-	-
Net and Comprehensive Loss (gain) from operations	$ 768,043	$ (2,412,863)	$ 1,564,196	$ 14,472,866	$ 28,282,880	$ 8,410,702	$ 7,534,456	$ 5,885,415
Basic and diluted (gain)/loss per share	$ (0.02)	$ (0.07)	$ 0.05	$ 0.46	$ 1.22	$ 0.41	$ 0.41	$ 0.47

Significant changes in key financial data from the three months ended December 31, 2019 through the three months ended March 31, 2020 reflect the suspension of development of the Company's single-port robotic surgical system while the Company seeks additional capital. Also impacting these changes is the requirement to revalue the Company's warrant liability at fair value, with subsequent changes recorded through net and comprehensive loss for the period.

During the first quarter of 2020, the Company had net and comprehensive loss of $768,043 compared to a loss of $28,282,880 for the same period in 2019. The significance of this change is primarily due to a reduction in research and development expenses from $14,408,612 in the three months ended March 31, 2019 to $46,119 in the same period in 2020. In addition, a gain on change in fair value of warrants of **$**1,117,476 was reported in the three months ended March 31, 2020 compared to a loss on change in fair value of warrants of $10,476,625 during the same period of 2019.

The significant decrease in research and development expenditures is attributed to the reduced funding available in the first quarter of 2020 compared to the same period of the prior year. The change in the fair value of warrants in each period was as a result of the increase or decline in the stock price at quarter end versus its previously reported value, thus increasing or reducing the warrant liability

Liquidity and Capital Resources

The Company currently does not generate any revenue (other than interest income on its cash balances) and accordingly it is primarily dependent upon equity financing for any additional funding required for development and operating expenses and to satisfy outstanding obligations.

During the second half of 2019, the Company was unable to secure sufficient capital to continue product development and preparation for submissions to regulatory authorities as previously planned. As a result, the Company has withdrawn all forward-looking statements included in its continuous disclosure documents with respect to the cost and timing of the development of its robotic surgical system since the fourth quarter of 2019.

During the first quarter of 2020, the Company raised gross proceeds of $3,717,930 ($3,346,667 net of costs) and subsequent to the first quarter, it raised $1,500,000 by way of an 8% senior secured promissory note, and $2,000,000 ($1,613,800 net of estimated closing costs) through a registered direct offering. The Company will need to secure additional financing before resuming its development plan at a satisfactory rate.

The ability of the Company to arrange financing in the future will depend in part upon prevailing capital market conditions and the business success of the Company. There can be no assurance that the Company will be successful in its efforts to arrange additional financing on terms satisfactory to the Company, or at all. If adequate funds are not available, or are not available on acceptable terms, the Company may not be able to resume its technology development program or to satisfy its obligations as and when they become due. If additional financing is raised by the issuance of shares or convertible securities from treasury, control of the Company may change and shareholders may suffer additional dilution, or loss of their investment.

The Company had cash and cash equivalents on hand of $1,760,219 and accounts payable and accrued liabilities, including the current portion of lease liability, of $10,210,103 excluding warrant liability at March 31, 2020, compared to $814,492 and $11,433,967 respectively, at December 31, 2019. The Company's working capital at March 31, 2020 was a deficit of $(7,688,354) excluding warrant liability, compared to working capital deficit of $(9,684,525) at December 31, 2019.

The Company has the following contractual obligations:

	Payments Due by Period				
Contractual Obligation existing at the date of this MD&A	**Total** **$**	**Less than 1 year** **$**	**1-3 years** **$**	**4-5 years** **$**	**After 5 years** **$**
Capital Leases	542,264	106,949	202,148	214,485	18,682
Note [1]	1,500,000	-	1,500,000	-	-
Primary Supplier Agreement	5,567,097	5,567,097	-	-	-
Total Contractual Obligations	**7,609,361**	**5,674,046**	**1,702,148**	**214,485**	**18,682**

(1) The 8% senior secured loan (the "Note") matures on April 28, 2023 and the unpaid principal balance owing under the Note, together with any accrued and unpaid interest and all other unpaid obligations under the Note, shall be due and payable in full on the earliest to occur of: (i) April 28, 2023, (ii) a Change of Control (as defined in the Note), or (iii) a Qualified Financing (as defined in the Note) subject to an accelerated due date under certain adverse conditions. See "*Offerings since March 31, 2020*"

The table below sets forth the Company's warrants (by series) that were previously issued and which remain outstanding.

	Issue Date	Expiry Date	Number Issued	Number Outstanding	Exercise Price (US$)	Exercise Price (CDN$)
			Note 1			
TMD.W.T.F	[1]16-Nov-15	16-Nov-20	233,740	233,740		48.00
TMD.W.T.G	[1]12-Feb-16	12-Feb-21	389,027	386,694		30.00
TMD.W.T.G	[1]23-Feb-16	23-Feb-21	58,226	58,226		30.00
TMD.W.T.H	[1]31-Mar-16	31-Mar-21	501,831	501,831		36.00
TMD.W.T.H	[1]14-Apr-16	31-Mar-21	75,275	75,275		36.00
TMD.W.T.I	[1]20-Sep-16	20-Sep-21	569,444	569,444		22.50
TMD.W.T.I	[1]27-Oct-16	20-Sep-21	67,667	67,667		22.50
Not Listed	[1]16-Mar-17	16-Mar-21	357,787	355,253		15.00
Not Listed	[1]29-Jun-17	29-Jun-22	1,612,955	75,810		6.00
Not Listed	[1]21-Jul-17	29-Jun-22	370,567	370,567		6.00
Not Listed	[1]24-Aug-17	24-Aug-22	563,067	563,067		6.00
Not Listed	[1]5-Dec-17	5-Dec-22	1,533,333	1,533,333		18.00
Not Listed	[1]10-Apr-18	10-Apr-23	1,126,665	1,126,665		10.50
Not Listed	[1]10-May-18	10-Apr-23	168,889	168,889		10.50
Not Listed	[2]10-Aug-18	10-Aug-23	7,679,574	6,661,068	2.92	
Not Listed	[3]21-Mar-19	21-Mar-24	8,455,882	8,455,882	3.95	
Not Listed	27-Mar-20	27-Mar-25	3,500,000	900,000	0.19	
Not Listed	6-May-20	6-Nov-25	2,757,252	2,757,252	0.3002	
			30,021,181	24,860,663		

Note 1 - After giving effect to the 30:1 Share Consolidation in June 2018
Note 2 - Includes a ratchet clause triggered August 29, 2019 lowering the exercise price from U.S. $3.20 to U.S. $2.92.
Note 3 - Includes a ratchet clause triggered August 29, 2019 lowering the exercise price from U.S. $4.00 to U.S. $3.95.

Development Objectives and Regulatory Plans

The Company has used a combination of internal resources and external development firms to execute the research, development and regulatory plans for the Company's single-port robotic surgical system. Development objectives were previously established to support the Company's planned FDA 510(k) filing for marketing clearance in the U.S., and submittal of a Technical File to a European Notified Body for achievement of the CE mark, which indicates that a product for sale within the European Economic Area has been assessed to conform with health safety and environmental protection requirements.

The Company has previously confirmed with the FDA that confirmatory human data will be required for its planned 510(k) regulatory submission. The performance of human surgeries with the single-port robotic surgical system will require an IDE from the FDA, which must be submitted and approved in advance. Further, the recruitment of surgeons from multiple hospital sites will be necessary to perform the surgeries. Each of these sites will require approval of their independent Institutional Review Board ("IRB") to approve the studies.

Previous results achieved by surgeons in operating prototypes in animal and cadaver studies have validated the potential for single incision surgeries to be performed with the Company's single-port robotic surgical system. Insights gained from these preclinical studies have directed the Company to make further product improvements. Such improvements were implemented in a capital equipment engineering confidence build of an improved prototype, which was announced in January 2019. On April 30, 2019, the Company announced that it had achieved hardware design freeze for its single-port robotic surgery system. In June 2019, the Company commenced preclinical live animal and cadaver studies according to GLP for FDA submittal. On July 18, 2019, the Company announced that it had completed all planned GLP surgical procedures necessary for its Investigational Device Exemption ("IDE") application to the FDA.

During the quarter ended September 30, 2019, the Company completed and documented the GLP procedures, and proceeded to complete the HFE studies, which included verification of production system operation with clinical experts under rigorous formal (summative) human factors
evaluation under simulated robotic manipulation exercises. During the quarter, the Company's European Notified Body also completed audits of the Company's quality system procedures and related documentation for ISO Certification.

During the quarter ended December 31, 2019, the Company received receipt of a final independent report from validation testing of system safety and usability, and completed a user manual for robotic system setup by operating room staff and surgeon operation. Receipt of ISO 13485: 2003 Certification was received January 24, 2020.

The future success of the Company is substantially dependent on the Company's ability to raise equity financing to fund its research and development program and on maintaining the support of its research and development and manufacturing service providers. See "*Liquidity and Capital Resources*".

Given the uncertainty of, among other things, the Company's ability to secure required capital to fund development and operating costs in a timely manner, product development timelines, regulatory processes and requirements (such as confirmatory human studies), actual costs and development times will exceed those set forth in the Company's MD&A for the three, six and nine months ended March 31, June 30 and September 30, 2019, and in the Company's 2018 annual information form dated March 31, 2019, and an accurate estimate of the future costs of the development milestones and regulatory phases is not possible at this time.

Current Development Plan

The Company's development milestones are set forth in the table below (the "Current Development Plan").

Milestone Number	*Development Milestones*	*Estimated Cost (in US million $)*	*Schedule for Milestone Completion*	*Comments*
Milestone 1	a)Obtain final independent report from validation testing of system safety and usability for the intended users and use environments under simulated robotic manipulation exercises intended to replicate essential surgical tasks b)Complete User Manual for robotic system setup by operating room staff and surgeon operation of surgeon workstation, patient cart, instruments and accessories c)Obtain ISO 13485 Certification[(1)]		Q4 2019	Completed Completed Completed Q1 - 2020
Milestone 2	a)Perform additional software development and test system performance b)Implement and test improvements to instruments, camera systems and accessories c)Perform biocompatibility testing of instruments, camera systems and accessories at independent lab d)Perform electrical safety testing for surgeon workstations and patient cart, including electromagnetic compatibility (EMC) and electromagnetic interference (EMI) tests at independent lab e)Update application for IDE as additional testing lab data is received and continue preparations for human confirmatory studies	TBD	TBD	

(1) It was previously disclosed that ISO 13485 Certification was expected to occur in the third quarter of 2019; receipt of the certification was actually received January 24, 2020.

Milestone 3	a)Launch rebranded product line, including logos with trademark pending, literature and presentation templates, product and packaging labeling, and new website b)Complete system software validation c)Submit IDE application to FDA[2]	TBD	TBD	
Milestone 4	a)Receive IDE approval from FDA[3] b)Receive approvals from IRB Committees of IDE hospitals c)Commence human confirmatory studies under IDE protocols for FDA submittal	TBD	TBD	
Milestone 5	a)Complete human confirmatory studies and patient follow-up and compile reports from human confirmatory studies b)Submit 510(k) application to FDA c)Submit Technical File to European Notified Body for review for CE mark d)Ongoing software development and implementation e)Planning and preparation for manufacturing and commercialization	TBD	TBD	
Milestone 6	a)Planning and preparation for commercialization	TBD	TBD	

Due to the ongoing limited availability of capital resources the Company has been unable to fund its planned pace of product development which has indefinitely moved out the projected date and will add to the estimated costs for the Company's submission of its 510(k) application. The Company has withdrawn the projections for achievement of all development milestones beyond Milestone 1, including their timing and cost.

(2) Due to the ongoing limited availability of capital resources as well as the necessary product changes identified, the Company has not yet submitted its IDE application to the FDA. In addition, the Company has been unable to fund planned software development, verification and validation or complete the necessary product development, testing and documentation needed to meet regulatory requirements for an IDE application to the FDA. The Company has withdrawn the projections for achievement of all development milestones beyond Milestone 1, including their timing and cost until such time as the capital resources become available to resume these activities.

(3) The Company has withdrawn the projections for achievement of all development milestones beyond Milestone 1, including their timing and cost.

The details above with respect to Milestones 2, 3, 4, 5 and 6 reflect the Company's current plans with respect to the development steps for its robotic surgical system. At this time, the Company is unable to provide any forecast of timing or cost estimate in respect of the milestones.

While the Company is assessing the availability of sufficient financing, it has taken temporary measures to reduce its cash burn over its historical rates, including the suspension of product development, staff reduction, sourcing more cost-effective resources and reducing its general and administrative overhead where possible.

During the third quarter of 2019, the Company completed the animal studies and the human factors evaluation studies originally planned for completion during the second quarter of 2019. However, data from the animal studies and human factors studies was delayed, followed by delays in receiving documentation required from third parties. In addition, the animal studies and human factors studies have identified additional product enhancements that the Company intends to implement before proceeding to human use, related to software, instrumentation and camera development. The implementation of product enhancements and the production of documentation for the Company's IDE application are paced by the availability of capital resources, which are currently insufficient to complete the work. As a result of these factors, the timing for submission of the IDE application to the FDA (Milestone 3) cannot be predicted at this time. Audits for ISO13485 were completed as planned during the third quarter and the ISO13485: 2003 certificate was issued and received by the Company on January 24, 2020.

Due to the nature of technology research and development and the Company's lack of sufficient capital, there is no assurance that these future objectives will be achieved, and there can be no assurance with respect to the time or resources that may be required. The Company expects that additional milestones could be identified as the development of its single-port robotic surgical system progresses, or existing milestones, budgets and the schedule for completion of each milestone may change depending on a number of factors including the results of the Company's development program, clarification of or changes to regulatory requirements, the availability of financing and the ability of development firms engaged by the Company to complete work assigned to them. The total costs and time to complete the development of the Company's single-port robotic surgical system cannot be forecast. Please see the section "*Forward-Looking Statements*".

Please also refer to the risk factors set forth starting on page 10 of the Company's Annual Information Form for the 2019 fiscal year, available on SEDAR at www.sedar.com.

Financings

Offerings Since March 31, 2020

May 2020 Financing

On May 6, 2020, the Company completed a registered direct offering pursuant to an agency agreement dated March 17, 2020 between the Company and H.C. Wainwright & Co., LLC ("Wainwright"), of 5,514,50 common shares of the Company at a per share purchase price of US $0.36268 per common share and 2,757,252 unregistered common share purchase warrants, resulting in total gross proceeds of $2,000,000 ($1,613,800 net of estimated closing cash costs including cash commission described below). Each warrant is exercisable to purchase one common share at an exercise price of US $0.3002 per common share for a period of five and one-half (5.5) years following the date of closing of the offering.

Pursuant to the placement agency agreement, in addition to the cash commission paid to Wainwright of $140,000, broker warrants were issued to Wainwright which entitle the holder to purchase 386,015 common shares at a price of US $0.45335 per share prior to expiry on November 6, 2025.

Senior Secured Loan from Global Medical Technology Company

On April 28, 2020, the Company received gross proceeds of $1.5 million from a senior secured loan provided by a leading global medical technology company (the "Corporate Lender") evidenced by an 8% $1.5 million senior secured promissory note ("Note") and a security agreement (the "Security Agreement") executed and delivered by the Company in favor of the Corporate Lender. The Note matures on April 28, 2023 and the unpaid principal balance owing under the Note, together with any accrued and unpaid interest and all other unpaid obligations under the Note, shall be due and payable in full on the earliest to occur of: (i) April 28, 2023, (ii) a Change of Control (as defined in the Note), or (iii) a Qualified Financing (as defined in the Note) subject to an accelerated due date under certain adverse conditions.

The Security Agreement grants a security interest in all of the Company's present and future property including all personal property, inventory, equipment and intellectual property to the Corporate Lender. In addition, the Corporate Lender's rights and powers include without limitation (a) exercising and enforcing all rights and remedies of a holder of collateral as if the Corporate Lender were the absolute owner of the collateral, (b) collection of any proceeds arising in respect of all of our property pledged as security for the loan, (c) license or sublicense, whether on an exclusive or nonexclusive basis, of any of the Company's intellectual property for such term and on such conditions and in such manner as the Corporate Lender in its sole judgment determines (taking into account such provisions as may be necessary to protect and preserve such intellectual property), and (d) the right to enforce its security in the event of a default which may include the appointment of a receiver by instrument or order of the court.

Offerings During Q1 2020

March 2020 Financing

On March 25, 2020, the Company entered into definitive agreements with institutional investors that provide for the purchase and sale of 7,000,000 common shares of the Company at a per share purchase price of US $0.17 per common share and 3,500,000 common share purchase warrants, resulting in total gross proceeds of approximately $1.2 million ($0.862 million net of closing costs including cash commission described below). Each whole warrant is exercisable to purchase one common share at an exercise price of US $0.19 per common share for a period of five years following the date of closing of the offering. The warrants were valued at $475,300 based on the value determined by the Black-Scholes model and the balance of $714,700 was allocated to common shares.

Wainwright acted as the exclusive placement agent for the offering. Pursuant to the placement agency agreement, in addition to the cash commission paid to Wainwright of $83,300, broker warrants were issued to Wainwright which entitle the holder to purchase 490,000 common shares at a price of US $0.2125 per share prior to expiry on March 25, 2025.

From January 3, 2020 to the date of this report, the Company has raised $2,071,930 through the sale of 4,408,048 common shares to Aspire Capital Fund, LLC ("Aspire Capital") in accordance with the terms of a common share purchase agreement ("Second Aspire Agreement") with Aspire Capital dated December 23, 2019, under which Aspire Capital committed to purchase up to $35.0 million of common shares of Titan at the Company's request from time to time, until June 23, 2022, subject to the terms and conditions of the agreement.

On January 3, 2020, Cambridge Design Partnership Ltd. ("Cambridge") agreed to purchase from the Company 501,148 common shares at a price of $0.50 per share and the purchase price was satisfied by way of Cambridge setting off $250,574 owing by the Company to Cambridge for services rendered by Cambridge.

Off-Balance Sheet Arrangements

As of the date of this report, the Company had no off-balance sheet arrangements.

Outstanding Share Data

The following table summarizes the outstanding share capital as of the date of this MD&A:

Type of Securities	**Number of Common Shares issued or issuable upon conversion**
Common Shares(1)	59,931,381
Stock options(2)	1,272,931
Warrants	24,860,663
Broker warrants(3)	2,005,496

Notes:

(1) Refer to details of the offerings in the previous section of this document.
(2) The Company has outstanding options enabling certain employees, directors, officers and consultants to purchase common shares. Includes 25,765 stock options issued January 2020 with an exercise price of CDN $0.657 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years.
(3) A total of 2,310,174 broker warrants were issued in connection with the April 2018, August 2018, March 2019, March 2020 and May 2020 offerings. As of the date hereof, 2,005,496 broker warrants remain outstanding. Details include the following:

- Pursuant to the agency agreement in respect of the August 2018 offering, in addition to the cash commission paid to the agents, 537,570 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one common share at the price of US $2.50 for a period of 24 months following the closing date.
- Pursuant to the March 2019 Agency Agreement, in addition to the cash commission paid to the agents, 591,911 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one common share at the price of US $3.40 for a period of 24 months following the closing date.
- Pursuant to the agency agreement in respect of the March 2020 offering, in addition to the cash commission paid to the agents, 490,000 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one common share at the price of US $0.21 for a period of 5 years following the closing date.
- Pursuant to the agency agreement in respect of the May 2020 offering, in addition to the cash commission paid to the agents, 386,015 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one common share at the price of US $0.45335 for a period of five and one half (5.5) years following the closing date.

Accounting Policies

The accounting policies set out in the notes to the unaudited condensed interim financial statements for the three months ended March 31, 2020 and the audited financial statements for the years ended December 31, 2019 have been applied in preparing the unaudited condensed interim financial statements for the three months ended March 31, 2020, and the comparative information presented in the unaudited condensed interim financial statements for the three months ended March 31, 2019.

These financial statements have been prepared in accordance with accounting principles applicable to going concern, which contemplates that the Company will be able to realize its assets and settle its liabilities in the normal course as they come due during the normal course of operations for the foreseeable future. The Company has shareholders' deficiency of $215,612,816 and current losses of $768,043. The Company currently does not generate any revenue (other than interest income on its cash balances) and accordingly it is primarily dependent upon equity financing for any additional funding required for development and operating expenses. These conditions indicate the existence of a material uncertainty that may cast significant doubt on the ability of the Company to continue as a going concern if additional funding is not secured.

The preparation of financial statements in conformity with IAS 34 requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of provisions at the date of the financial statements and the reported amount of expenses during the period. Financial statement items subject to significant judgement include, (a) the measurement of stock-based compensation and (b) the fair value estimate of the initial and subsequent measurement of warrant liabilities. While management believes that the estimates and assumptions are reasonable, actual results may differ.

(a) Stock Options

The Black-Scholes model used by the Company to determine fair values of stock options and warrants was developed for use in estimating the fair value of the stock options and warrants. This model requires the input of highly subjective assumptions including future stock price volatility and expected time until exercise. Changes in the subjective input assumptions can materially affect the fair value estimate.

(b) Warrant Liability

In accordance with IAS 32, since the exercise price of certain of the Company's warrants are not a fixed amount, as they are a) denominated in a currency (Canadian dollar) other than the Company's functional currency (U.S. dollar), or, b) as with the warrants issued August 10, 2018, March 21, 2019 and March 2020 have a cashless exercise option, the warrants are accounted for as a derivative financial liability. The warrant liability is initially measured at fair value and subsequent changes in fair value are recorded through net and comprehensive loss for the period. The accounting guidance for fair value measurements prioritizes the inputs used in measuring fair value into the following hierarchy:

Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 – Inputs other than quoted prices included within Level 1 that are directly or indirectly observable;

Level 3 – Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

The fair value of the Company's warrant liability is initially based on level 2 (significant observable inputs) and at March 31, 2020 is based on level 1, quoted prices (unadjusted) in an active market, for the Company's listed warrants and level 2 for the Company's unlisted warrants.

Related Party Transactions

During the quarter ended March 31, 2020, transactions between the Company and directors, officers and other related parties were related to compensation matters in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

Financial Instruments

The Company's financial instruments consist of cash and cash equivalents, amounts receivable, accounts payable and accrued liabilities and warrant liability. The fair value of these financial instruments approximates their carrying values, unless otherwise noted, due to the short-term maturities of these instruments or the discount rate applied. As of April 28, 2020, the Company will include a senior secured promissory note issued for $1.5 million in its financial instruments. See the section below "*Events Subsequent to the quarter ended March 31, 2020*".

Events Subsequent to the quarter ended March 31, 2020

Warrants Exercised

Subsequent to March 31, 2020, 200,000 warrants were exercised for gross proceeds of $38,000.

Lease Facilities

On April 1, 2020, the Company took possession of a new facility in Chapel Hill, North Carolina which will be established as the Company's operational center in the U.S.

COVID-19

Since December 31, 2019, the outbreak of the novel strain of coronavirus, specifically identified as "COVID-19", has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and social distancing, have caused material disruption to business globally resulting in an economic slowdown. Global equity markets have experienced significant volatility and weakness. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The duration and impact of the COVID-19 outbreak is unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on the financial results and condition of the Company in future periods.

See also the section "*Financing Since March 31, 2020*".

Outlook

During the quarter ended March 31, 2020, the Company secured capital but the amount was not sufficient to resume its product development or to accomplish any of its previously stated milestones. As previously stated, on October 15, 2019, the Company announced that it had withdrawn all forward-looking statements included in its continuous disclosure documents with respect to the cost and timing of the development of its robotic surgical system beyond the fourth quarter of 2019.

The Company does not have sufficient capital to continue the development of its robotic surgical system and there can be no assurance that the Company will be successful in securing additional financing. Any further development of the Company's robotic surgical system is entirely contingent on the availability of financing and, accordingly, any future development of the Company's robotic surgical system cannot be predicted at this time. The Company's Primary Supplier has agreed to a repayment schedule that includes the resumption of development services. Litigation between Naglreiter, a former service provider, and the Company in respect of alleged amounts owed by the Company continues. The Company has taken certain measures to reduce its cash burn over its historical rates, including a standstill of its development program, sourcing more cost-effective resources and reducing its general and administrative overhead where possible.

In 2019, the Company's Board of Directors established a special committee of independent directors to oversee the global search for strategic alternative transactions to maximize shareholder value. The mandate of the special committee includes a wide range of potential transactions, including financing through equity or debt, licensing, merger or acquisition. There can be no assurance that the Company will be successful in securing additional capital or identifying a suitable strategic alternative transaction. In the event that the Company is unable to secure additional capital or conclude a suitable strategic alternative transaction, it may be unable to pay down past due invoices or resume and continue its product development. It is also possible that in such circumstances its relationships with key service providers may further deteriorate. As a result of these factors, the schedule for completion of the Company's stated milestones, if at all, cannot be predicted at this time.

Additional information relating to the Company, including Titan's Annual Report for the 2019 fiscal year, is available on SEDAR at www.sedar.com and www.sec.gov.

Exhibit 99.4

FORM 52-109F2
CERTIFICATION OF INTERIM FILINGS
FULL CERTIFICATE

I, David McNally, Chief Executive Officer of Titan Medical Inc., certify the following:

1. ***Review:*** I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of Titan Medical Inc. (the "issuer") for the interim period ended March 31, 2020.

2. ***No misrepresentations:*** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.

3. ***Fair presentation:*** Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.

4. ***Responsibility:*** The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings,* for the issuer.

5. ***Design:*** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer's other certifying officer and I have, as at the end of the period covered by the interim filings

   (a) designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that

      (i) material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared; and

      (ii) information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

   (b) designed ICFR, or caused it 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 the issuer's GAAP.

5.1 ***Control framework:*** The control framework the issuer's other certifying officer and I used to design the issuer's ICFR is Integrated Framework (COSO).

5.2 ***ICFR – material weakness relating to design:*** **N/A**

5.3 ***Limitation on scope of design:*** **N/A**

6. ***Reporting changes in ICFR:*** The issuer has disclosed in its interim MD&A any change in the issuer's ICFR that occurred during the period beginning on January 1, 2020 and ended on March 31, 2020 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.

Date: May 13, 2020

(SIGNED) "David McNally"

David McNally
Chief Executive Officer
Titan Medical Inc.

Exhibit 99.5

FORM 52-109F2
CERTIFICATION OF INTERIM FILINGS
FULL CERTIFICATE

I, Stephen Randall, Chief Financial Officer of Titan Medical Inc., certify the following:

1. ***Review:*** I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of Titan Medical Inc. (the "issuer") for the interim period ended March 31, 2020.

2. ***No misrepresentations:*** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.

3. ***Fair presentation:*** Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.

4. ***Responsibility:*** The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings,* for the issuer.

5. ***Design:*** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer's other certifying officer and I have, as at the end of the period covered by the interim filings

   (a) designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that

      (i) material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared; and

      (ii) information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

   (b) designed ICFR, or caused it 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 the issuer's GAAP.

5.1 ***Control framework:*** The control framework the issuer's other certifying officer and I used to design the issuer's ICFR is Integrated Framework (COSO).

5.2 ***ICFR – material weakness relating to design:*** N/A

5.3 ***Limitation on scope of design:*** N/A

6. ***Reporting changes in ICFR:*** The issuer has disclosed in its interim MD&A any change in the issuer's ICFR that occurred during the period beginning on January 1, 2020 and ended on March 31, 2020 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.

Date: May 13, 2020

(SIGNED) "Stephen Randall"

Stephen D. Randall
Chief Financial Officer
Titan Medical Inc.