

**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 August, 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 99.2 and Exhibit 99.3 on 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: August 12, 2020

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

EXHIBIT INDEX

- 99.1 News Release dated August 12, 2020
- 99.2 Interim Financial Statements – June 30, 2020
- 99.3 MD&A – June 30, 2020
- 99.4 Certification of interim filings - CEO
- 99.5 Certification of interim filings - CFO

Titan Medical Reports Second Quarter 2020 Financial Results

TORONTO--(BUSINESS WIRE)--August 12, 2020--Titan Medical Inc. (“Titan” or the “Company”)(TSX: TMD) (Nasdaq: TMDI), a medical device company focused on the design and development of single-port robotic surgical technologies, announces financial results for the three and six months ended June 30, 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 consolidated financial statements and management’s discussion and analysis for the period ended June 30, 2020 may be viewed at www.sedar.com and at www.sec.gov.

David McNally, President and CEO of Titan, said, “The most significant event of the first half of 2020 was the execution of a license agreement, a development and license agreement and a senior secured note with Medtronic plc, which we announced on June 4. We are honored to have secured this relationship based on the value demonstrated in our intellectual property and technology, and the confidence in our technical know-how in single-port robotic surgery to develop, over the course of the next 12 months, technologies for the mutual benefit of each company.”

Mr. McNally continued, “Following the announcement of the agreements with Medtronic, we received a \$10 million license payment in accordance with the license agreement. We then secured and announced the closing of an \$18 million registered direct offering on June 11, 2020, which has allowed us to resume development of instruments for our single-port robotic surgical system, and satisfies one of the milestones under the development and licensing agreement.”

Mr. McNally concluded, “During the first half of 2020, we also reached agreement on a payment plan with one of our product development suppliers and resolved pending litigation with another service provider. We are now focused on staffing our newly created U.S. affiliate’s new facility in Chapel Hill, North Carolina in order to execute on the development milestones associated with our single-port surgical system, while continuing progress toward those associated with the development and license agreement.”

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

- On January 6, 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 27, the Company announced the closing of a registered direct offering priced at-the-market under Nasdaq rules, resulting in total gross proceeds of approximately \$1.2 million.
 - On April 30, the Company announced the agreement of a payment plan for outstanding amounts and resumption of development services with one of its product development suppliers.
 - On May 6, the Company announced the closing of a registered direct offering priced at-the-market under Nasdaq rules, resulting in total gross proceeds of approximately \$2.0 million.
 - On June 4, the Company, announced a development and license agreement with Medtronic to further the development of robotic-assisted surgical technologies, as well as a separate license agreement with Medtronic in respect of certain intellectual property of the Company.
 - On June 8, the Company announced a registered direct offering priced at-the-market under Nasdaq rules, resulting in total gross proceeds of approximately \$18 million.
 - On June 9, the Company announced the settlement of pending litigation with Nagreiter Consulting, LLC.
 - On June 11, the Company announced the appointment of Phillip L. McStotts to the Company's Board of Directors and its Audit Committee.
 - On June 15, the Company announced that it established Titan Medical USA Inc. as a wholly owned U.S. subsidiary, which is based in Chapel Hill, North Carolina at a facility that will initially be used for research and development activities.
 - On June 25, the Company announced that it had promoted intellectual property strategy leader Jasminder Brar to Vice President of Legal, IP and Strategic Initiatives, and General Counsel.
 - On August 1, David McNally, President and CEO of Titan Medical, presented at the Society of Robotic Surgery (SRS) 2020 World Robotic Symposium in the virtual plenary session titled "Future Robotic Platforms".
 - On July 30, the Company announced that it had completed design enhancements to instruments compatible for use with its single-port robotic surgical system.
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Financial results for the three and six months ended June 30, 2020 include:

- Research and development (“R&D”) expenses for the three and six months ended June 30, 2020 were \$121,463 and \$167,582, respectively, compared with R&D expenses of 18,360,674 and \$32,769,286, respectively for the corresponding prior-year periods, as the Company suspended product development during the first half of 2020 due to insufficiency of available capital.
 - Net and comprehensive losses for the three and six months ended June 30, 2020 were 1,143,199 and \$1,911,242, compared with a net and comprehensive losses of 14,472,866 and \$42,755,746, for the three and six months ended June 30, 2019, respectively. In addition to reduced R&D expenses, the results for both periods include recognition in June 2020 of \$10 million in revenue from the license agreement with Medtronic, a gain on settlement of a supplier claim, and the impact of changes in the valuation of outstanding warrants.
 - Cash and cash equivalents as of June 30, 2020 were \$28,689,757, compared with cash and cash equivalents of \$814,492 as of December 31, 2019. At June 30, 2020, current liabilities, excluding warrant liability were \$8,471,270 compared with \$11,433,967 as of December 31, 2019.
 - At June 30, 2020, the Company had working capital of \$21,746,851 compared to a working capital deficit of \$9,684,525 at December 31, 2019.
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About Titan

Titan Medical Inc. is focused on robotic-assisted technologies for application in minimally invasive surgery (“MIS”). Titan 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 systems and multi-articulating instruments for performing MIS procedures, and a surgeon workstation that provides an ergonomic interface to the patient cart and a 3D high-definition endoscopic view of the MIS procedure. Titan intends to initially pursue gynecologic surgical indications for use of its single-port robotic surgical system.

For more information, visit 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, include but are not limited to statements with respect to the planned achievement of milestones associated with the license agreement, development and license agreement and senior secured note with Medtronic, Titan’s intention to develop technologies for the mutual benefit of Titan and Medtronic, Titan’s focus on staffing its U.S. affiliate’s new facility in Chapel Hill, North Carolina and its reasons for doing so and the development of Titan’s own single-port surgical system, it’s anticipated features and the initial surgical indications Titan intends to pursue. These statements 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 recruit and retain key employees and to complete 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

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TITAN MEDICAL INC.
Unaudited Condensed Interim Consolidated Financial Statements
Three and Six Months Ended June 30, 2020 and 2019
(IN UNITED STATES DOLLARS)

TITAN MEDICAL INC.
Unaudited Condensed Interim Consolidated Balance Sheets
As at June 30, 2020 and December 31, 2019
(In U.S. Dollars)

	Note	June 30, 2020	December 31, 2019
Assets			
Current Assets:			
Cash and cash equivalents		\$ 28,689,757	\$ 814,492
Amounts receivable		142,819	84,097
Deposits	9	481,400	481,400
Prepaid expense		904,145	369,453
Total Current Assets		\$ 30,218,121	\$ 1,749,442
Right of use assets - Leases	3	440,328	30,394
Patent rights	4	1,688,485	1,601,745
Total Assets		\$ 32,346,934	\$ 3,381,581
Liabilities			
Current Liabilities:			
Accounts payable and accrued liabilities	5	\$ 8,376,796	\$ 11,412,896
Current portion of lease liability	3	94,474	21,071
Warrant liability	6	19,770,834	3,621,444
Total Current Liabilities		\$ 28,242,104	\$ 15,055,411
Note payable	7	\$ 1,653,822	\$ -
Long-term lease liability	3	367,038	8,001
Total Liabilities		\$ 30,262,964	\$ 15,063,412
Shareholders' Equity (Deficiency)			
Share Capital	8	\$ 210,101,795	\$ 194,859,415
Contributed Surplus		8,738,190	8,303,527
Deficit		(216,756,015)	(214,844,773)
Shareholders' Equity (Deficiency)		\$ 2,083,970	\$ (11,681,831)
Total Liabilities and Deficiency		\$ 32,346,934	\$ 3,381,581

Commitments (Note 9)
Subsequent events (Note 13)
See notes to financial statements

Approved on behalf of the Board:

"signed"

"signed"

John E. Barker
Director

David McNally
Chairman and CEO

TITAN MEDICAL INC.
Unaudited Condensed Interim Consolidated Statements of Net and Comprehensive Loss
For the Three and Six Months Ended June 30, 2020 and 2019
(In U.S. Dollars)

	Note	Three Months Ended June 30, 2020	Six Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Revenue		\$ 10,000,000	\$ 10,000,000	\$ -	\$ -
Expenses					
Amortization		\$ 35,475	\$ 49,570	\$ 7,291	\$ 13,466
Consulting fees		83,744	195,869	451,068	720,497
Stock based compensation	8b	206,087	434,663	740,051	991,408
Insurance		122,415	245,577	116,123	234,612
Management salaries and fees		605,277	1,146,872	749,880	1,398,466
Marketing and investor relations		8,843	17,487	102,487	208,676
Office and general		45,955	185,842	77,136	194,407
Professional fees		1,031,457	1,389,943	303,460	406,845
Rent		5,960	13,201	16,515	28,751
Research and development		121,463	167,582	18,360,674	32,769,286
Travel		1,622	12,760	80,631	147,995
Interest charges		252,542	465,239	-	-
Foreign exchange (gain)		24,580	(48,923)	148,689	41,047
		\$ 2,545,420	\$ 4,275,682	\$ 21,154,005	\$ 37,155,456
Net Earnings (Loss) from Operations		7,454,580	5,724,318	(21,154,005)	(37,155,456)
Finance Income (Cost)					
Interest		\$ 4,831	\$ 6,574	\$ 71,187	\$ 94,218
Gain on settlement	5	1,839,626	1,839,626	-	-
Gain (loss) on change in fair value of warrants	6	(8,782,920)	(7,665,444)	6,609,952	(3,866,673)
Warrant liability issue cost		(1,659,316)	(1,816,316)	-	(1,827,835)
		\$ (8,597,779)	\$ (7,635,560)	\$ 6,681,139	\$ (5,600,290)
Net and Comprehensive Loss for the Period		\$ (1,143,199)	\$ (1,911,242)	\$ (14,472,866)	\$ (42,755,746)
Basic and Diluted Loss per Share		\$ (0.02)	\$ (0.04)	\$ (0.46)	\$ (1.57)
Weighted Average Number of Common Shares					
Basic and Diluted		60,764,929	52,518,608	31,150,237	27,190,063

See notes to financial statements

TITAN MEDICAL INC.
Unaudited Condensed Interim Consolidated Statements of Shareholders' Equity and Deficit
For the Periods Ended June 30, 2020 and December 31, 2019
(In U.S. Dollars)

	Note	Share Capital Number	Share Capital Amount	Contributed Surplus	Net Income (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	8a	8,455,882	13,717,131	-	-	13,717,131
Share issue expense		-	(1,498,498)	-	-	(1,498,498)
Warrants exercised during the period	8a	1,018,506	7,002,043	-	-	7,002,043
Stock based compensation	8b	-	-	991,408	-	991,408
Net and comprehensive loss		-	-	-	(42,755,746)	(42,755,746)
Balance - June 30, 2019		31,150,237	\$ 189,723,070	\$ 7,643,817	\$ (215,693,440)	\$ (18,326,553)
Balance - December 31, 2019		39,907,681	\$ 194,859,415	\$ 8,303,527	\$ (214,844,773)	\$ (11,681,831)
Issued pursuant to agency agreement ¹	8a	23,923,700	12,818,657	-	-	12,818,657
Share issue expense		-	(487,788)	-	-	(487,788)
Common stock equivalents converted	8a	8,000,000	800	-	-	800
Warrants exercised during the period	8a	3,750,000	2,910,711	-	-	2,910,711
Stock based compensation	8b	-	-	434,663	-	434,663
Net and comprehensive loss		-	-	-	(1,911,242)	(1,911,242)
Balance - June 30, 2020		75,581,381	\$ 210,101,795	\$ 8,738,190	\$ (216,756,015)	\$ 2,083,970

1. Includes net proceeds from the issuance of common share equivalents (see note 8a)
See notes to financial statements

TITAN MEDICAL INC.
Unaudited Condensed Interim Consolidated Statements of Cash Flows
For the Three and Six Months Ended June 30, 2020 and 2019
(In U.S. Dollars)

	Three Months Ended June 30, 2020	Six Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Cash provided by (used in):				
Operating activities:				
Net loss for the period	\$ (1,143,199)	\$ (1,911,242)	\$ (14,472,866)	\$ (42,755,746)
Items not involving cash:				
Amortization	35,475	49,570	7,291	13,466
Stock based compensation	206,087	434,663	740,051	991,408
Warrant liability-fair value adjustment	8,782,920	7,665,444	(6,609,952)	3,866,673
Warrant liability-foreign exchange adjustment	12,997	(38,094)	142,682	36,625
Non-cash issue costs	737,894	764,134	-	-
Non-cash settlement included in payables	1,839,626	2,090,200	-	-
Non-cash note payable expenses and accrued interest	153,822	153,822	-	-
Changes in non-cash working capital items:				
Amounts receivable, prepaid expenses and deposits	(766,837)	(593,417)	1,294,599	(283,330)
Accounts payable and accrued liabilities	(3,647,795)	(4,875,714)	5,736,133	5,783,889
Cash from (used) in operating activities	\$ 6,210,990	\$ 3,739,366	\$ (13,162,062)	\$ (32,347,015)
Financing activities:				
Net proceeds from issuance of common shares and warrants ¹	19,272,277	22,749,702	(2,997)	31,374,911
Proceeds from note payable	1,500,000	1,500,000	-	-
Repayment of lease liabilities	(6,299)	(10,243)	-	-
Cash provided by financing activities	\$ 20,765,978	\$ 24,239,459	\$ (2,997)	\$ 31,374,911
Investing Activities:				
Additions to patents	(47,430)	(103,560)	(125,198)	(178,956)
Cash used in investing activities	\$ (47,430)	\$ (103,560)	\$ (125,198)	\$ (178,956)
Increase (Decrease) in cash and cash equivalents	26,929,538	27,875,265	(13,290,257)	(1,151,060)
Cash and cash equivalents, beginning of the period	1,760,219	814,492	23,610,440	11,471,243
Cash and cash equivalents, end of the period	\$ 28,689,757	\$ 28,689,757	\$ 10,320,183	\$ 10,320,183
Cash and cash equivalents comprise:				
Cash	\$ 970,690	\$ 970,690	\$ 1,392,741	\$ 1,392,741
Cash Equivalents	27,719,067	27,719,067	8,927,442	8,927,442
	\$ 28,689,757	\$ 28,689,757	\$ 10,320,183	\$ 10,320,183

1. Includes net proceeds from the issuance of common share equivalents (see note 8a)
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 of its single-port robotic surgical system. 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.

In June 2020, the Company established a wholly owned subsidiary, Titan Medical USA Inc. ("Titan USA" or "Subsidiary"), a corporation that is duly organized and existing under the laws of Delaware.

Basis of Preparation:

(a) Statement of Compliance

These condensed interim consolidated financial statements for the three and six months ending June 30, 2020, have been 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 consolidated financial statements were authorized for issue by the Board of Directors on August 12, 2020.

(b) Basis of Measurement

These condensed interim consolidated 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) Basis of Consolidation

These condensed interim consolidated financial statements incorporate the financial statements of the Company and its wholly owned subsidiary, Titan USA. The accounts of the subsidiary were prepared for the same reporting period as the Company, using consistent accounting policies. Intercompany transactions, balances and unrealized gains or losses on transactions have been eliminated.

(d) Functional and Presentation Currency

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

1. **DESCRIPTION OF BUSINESS (continued)**

(e) **Use of Estimates and Judgements**

The preparation of financial statements in conformity with IAS 34, Interim Financial Reporting, 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: the measurement of stock-based compensation, the fair value estimate of the initial measurement of lease and warrant liabilities and the remeasurement of unlisted warrants. While management believes that the estimates and assumptions are reasonable, actual results may differ.

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 as they come due during the normal course of operations for the foreseeable future. The Company has shareholders' equity of \$2,083,970 including losses for the six months ended June 30, 2020 of \$1,911,242. The working capital as at June 30, 2020 is \$21,746,851, excluding warrant liability. As a result of its recent financing activities, the Company has cash and cash equivalents of \$28,689,757 at June 30, 2020.

The Company currently does not generate any revenue (other than from its agreements with Medtronic, (as defined herein - see Notes 2 and 7) and interest income on its cash balances) and accordingly, it is primarily dependent upon equity financing for any additional funding required to complete its research and development relating to its single-port robotic surgical system and operating expenses. If additional funding is not available, the pace of the Company's product development plan may be reduced. These conditions indicate 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. However, management believes that the Company has sufficient funds to meet its obligations under a reduced development plan, if necessary, for the ensuing twelve months.

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) **Revenue Recognition**

The Company currently recognizes revenue when it has persuasive evidence of a contract, performance obligations have been identified and satisfied, payment terms have been identified, and it is probable that the Company will collect the consideration it is entitled to. On June 3, 2020, the Company entered into a License Agreement (see note 7) with a U.S. affiliate of Medtronic plc ("Medtronic"), whereby the Company is providing exclusive access to certain IP rights relating to robotic assisted surgical technologies. The Company is accounting for the license fee at the point in time when the rights were transferred.

- Revenue from the License Agreement for intellectual property rights and know-how ("Royalty Payment") is recognized when rights are granted and customer acceptance is established. Compensation received for the performance of technology transfer services relating to the License Agreement is accounted for separately from the Royalty Payment and will be recognized at the time the service is performed.
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2. **SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)**

- Revenue from the Development Agreement (see note 7) and the allocation of ownership and license rights developed under each milestone is recognized when the rights are granted and customer acceptance is established.

Under the terms of the Development Agreement, payment is dependent on when the customer confirms completion of each milestone as defined. Due to the uncertainty of milestone achievements and entitlement of payments, the Company recognizes revenue only upon acceptance by the customer of work performed and the milestone achieved.

(b) Warrant Liability

Certain of the Company's warrants have exercise prices that are not fixed and, in accordance with IAS 32, 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 period.

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 period. 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 with the change in fair value recorded through Net and Comprehensive Loss for the period. Prior to March 31, 2019, the Black-Scholes 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.

(c) 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.

TITAN MEDICAL INC.
Notes to the Unaudited Condensed Interim Consolidated Financial Statements
For the Six Months Ended June 30, 2020
(In U.S. Dollars)

3. RIGHT OF USE ASSETS – LEASE

For the six months ended June 30, 2020	Cost	Accumulated Amortization	Net Book Value
Balance at December 31, 2019	\$ 34,172	\$ (3,778)	\$ 30,394
Additions during the period	442,684	-	442,684
Amortization in the period	-	(32,750)	(32,750)
Balance at June 30, 2020	\$ 476,856	\$ (36,528)	\$ 440,328

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 June 30, 2020, the Company recognized \$11,330 of amortization and \$8,165 in interest expense relating to this lease and repaid \$8,649 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 was April 1, 2020, the date the space was ready-for-use. As of April 1, 2020, the Company recognized a right-of-use asset and a lease liability of \$442,684 relating to this lease. For the period ended June 30, 2020, the Company recognized \$21,420 of amortization and \$6,457 in interest expense relating to this lease and repaid \$1,594 of the lease liability.

4. PATENT RIGHTS

For the six months ended June 30, 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 period	103,560	-	103,560
Amortization in the period	-	(16,820)	(16,820)
Balance at June 30, 2020	\$ 1,960,310	\$ (271,825)	\$ 1,688,485

For the six months ended June 30, 2019	Cost	Accumulated Amortization & Impairment Losses	Net Book Value
Balance at December 31, 2018	\$ 1,398,713	\$ (226,228)	\$ 1,172,485
Additions during the period	178,956	-	178,956
Amortization in the period	-	(13,466)	(13,466)
Balance at June 30, 2019	\$ 1,577,669	\$ (239,694)	\$ 1,337,975

5. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

The balance of accounts payable and accrued liabilities at June 30, 2020 is \$8,376,796 (December 31, 2019 – \$11,412,896). The majority of the payables relate to amounts owed to the Company’s product development suppliers amounting to \$6,185,381, with \$1,572,920 relating to insurance, legal and audit and the balance relating to regular business operations.

Nagreiter Consulting Litigation

In late 2019, the Company became involved in litigation with Nagreiter Consulting, LLC. On June 8, 2020, the Company entered into a settlement agreement pursuant to which (i) a sum of \$1,050,000 was paid to Nagreiter, (ii) Nagreiter returned certain personal property and related electronic data in its possession, (iii) and the pending litigation was dismissed. The Company recognized a gain on settlement of \$1,839,626 in the period.

6. WARRANT LIABILITY

	Six Months Ended June 30, 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	-	-
Issue of warrants expiring November 6, 2025t	2,757,252	508,200	-	-
Issue of warrants expiring June 10, 2024	9,000,000	9,709,200	-	-
Warrants exercised during the period	(3,750,000)	(2,170,660)	(1,018,506)	(3,742,824)
Warrants expired during the period	-	-	(135,824)	-
Foreign exchange adjustment during the period	-	(38,094)	-	17,687
Fair value adjustment during the period	-	7,665,444	-	(19,800,645)
Ending Balance	32,710,663	\$ 19,770,834	21,203,411	\$ 3,621,444

7. NOTE PAYABLE

On June 3, 2020, the Company entered into a development and license agreement (the “Development Agreement”) with Medtronic in connection with the development of robotic assisted surgical technologies and a separate license agreement (the “License Agreement”) with Medtronic in respect of certain of already developed technologies.

On April 28, 2020, the Company received a \$1.5 million loan from Medtronic and, on June 3, 2020, the loan was amended and restated (the “Note”) and the Company executed and delivered a security agreement in favour of Medtronic (the “Security Agreement”). The Note has as principal amount of \$1.5 million plus \$132,000 equal to certain legal, transaction and intellectual property related expenses incurred by Medtronic pursuant to the Medtronic agreements and will bear interest at the rate of 8% per annum. 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

7. **NOTE PAYABLE (continued)**

payable in full on the earliest to occur of: (i) June 3, 2023, (ii) a Change of Control (as defined in the Note), or (iii) the completion of the last milestone under the Development Agreement. For the period ended June 30, 2020, the Note has accrued interest of \$21,822.

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, Medtronic's rights and powers include without limitation (a) exercising and enforcing all rights and remedies of a holder of collateral as if Medtronic were the absolute owner of the collateral, (b) collection of any proceeds arising in respect of all of the Company's 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 Medtronic 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.

8. **SHARE CAPITAL**

- a) **Authorized:** unlimited number of common shares, no par
Issued: 75,581,381 (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.

June 2020 Offering

On June 10, 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 6,500,000 common shares (the "Common Shares"), 11,500,000 common share equivalents (each, a "June 2020 Common Share Equivalent") and 9,000,000 Common Share purchase warrants (each a "June 2020 Common Warrant") for total gross proceeds of approximately \$18,000,000 (\$16,500,000 net of closing cash costs including cash commissions described below). The Common Shares, June 2020 Common Share Equivalent and June 2020 Common Warrants were sold in fixed combinations at an offering price of \$1.00, consisting of one Common Share and one-half June 2020 Common Warrant or one June 2020 Common Share Equivalent and one-half June 2020 Common Warrant. Each June 2020 Common Warrant is convertible into one Common Share at a conversion price of \$1.00 per Common Share for a period of four (4) years following the date of the closing of the offering. Each June 2020 Common Share Equivalent is convertible into one Common Share at a conversion price of \$0.0001 and will expire when converted in full.

Pursuant to the placement agent agreement, in addition to the cash commission paid to Wainwright of \$1,260,000, broker warrants were issued to Wainwright which entitle the holder to purchase 1,260,000 Common Shares at an exercise price of US\$1.25 per share prior to expiry on June 10, 2024.

Of the 11,500,000 June 2020 Common Stock Equivalents, 8,000,000 were converted between June 10, 2020 and June 30, 2020 for total proceeds of \$800.

8. SHARE CAPITAL (continued)

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 Wainwright that provide for the purchase and sale of 5,514,504 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 (each, a "May 2020 Warrant"), resulting in total gross proceeds of \$2,000,000 (\$1,575,000 net of estimated closing cash costs including cash commission described below). Each May 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.

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 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 "March Warrant"), resulting in total gross proceeds of \$1,190,000 (\$862,294 net of closing cash costs including cash commission described below). Each March 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.

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.

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.

8. *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.

8. *SHARE CAPITAL (continued)*

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:

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 reclassified from warrant liability to common stock.

8. **SHARE CAPITAL (continued)**

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 June 30, 2020, 10,082,256 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.

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 period ended June 30, 2020, \$434,663 of stock-compensation expense was recorded (June 30, 2019 – \$991,408).

A summary of the status of the Company's outstanding stock options as of June 30, 2020 and December 31, 2019 and changes during the periods ended on those dates is presented in the following table:

Stock Options - CDN \$ denominated	Six Months Ended June 30, 2020		Year Ended December 31, 2019	
	Number of Stock Options	Weighted average Exercise Price (CDN)	Number of Stock Options	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	(17,980)	24.55	(50,773)	31.79
Balance ending	868,164	\$ 5.46	860,379	\$ 5.89
Stock Options - USD \$ denominated	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
Total number of stock options	1,254,951		1,714,421	

8. *SHARE CAPITAL (continued)*

The weighted-average remaining contractual life and weighted-average exercise price of options outstanding and of options exercisable as at June 30, 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	6.58	25,765	
\$ 3.28	31,498	5.17	31,498	
\$ 4.50	18,936	2.78	18,936	
\$ 4.54	735,998	3.77	379,030	
\$ 4.80	3,040	0.21	3,040	
\$ 9.00	11,481	5.02	11,481	
\$ 9.60	1,105	0.27	1,105	
\$ 11.70	6,667	0.44	6,667	
\$ 12.00	1,948	0.43	1,948	
\$ 30.00	28,260	1.15	28,260	
\$ 30.60	2,096	0.48	2,096	
\$ 32.40	810	0.58	810	
\$ 45.30	560	0.12	560	
	868,164	3.75	511,196	

US Dollar Denominated Options				
Exercise Price (USD)	Number Outstanding	Weighted-average remaining contractual life (years)	Options Exercisable	
\$ 1.55	50,349	1.47	50,349	
\$ 2.20	2,165	2.05	2,165	
\$ 3.40	294,273	5.87	197,273	
\$ 3.72	40,000	2.19	-	
	386,787	5.14	249,787	
Total	1,254,951	4.11	760,983	

The weighted average exercise price of Canadian dollar denominated options outstanding is CDN \$5.46 and CDN \$6.10 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.

Options are granted to directors, officers, employees, and consultants at various times. Options are to be settled by physical delivery of shares.

8. SHARE CAPITAL (continued)

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 six months ended June 30, 2020 and 2019 are as follows:

	<u>2020 - CDN</u>	<u>2019 - US</u>
Fair value calculated	CDN \$0.43	US \$1.76
Share price at grant	CDN \$0.62	US \$2.84
Exercise price	CDN \$0.66	US \$3.40
Expected option life	3.5 years	3.5 years
Risk free interest rate (based on government bonds)	1.41%	1.61%
Expected volatility	109.00%	98.43%
Expected dividends	Nil	Nil

c) **Warrants**

In addition to the warrants accounted for as a liability (see Note 5), at June 30, 2020, the Company has 3,265,496 broker warrants that are issued, outstanding and exercisable (December 31, 2019 - 1,219,276). These broker warrants expire between August 10, 2020 and November 6, 2025 (December 31, 2019 - broker warrants had expiry dates between April 10, 2020 and March 21, 2021).

9. 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 June 30, 2020, \$4,132,120 in purchase orders remain outstanding (December 31, 2019 - \$1,327,294). The Company also has on deposit with a U.S. supplier \$481,400 to be applied against future invoices (December 31, 2019 - \$481,400).

10. RELATED PARTY TRANSACTIONS

During the six months ended June 30, 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.

10. RELATED PARTY TRANSACTIONS (continued)

Compensation paid to executive officers for the three and six months ended June 30, 2020 amounted to \$218,596 and \$453,531 compared to \$446,911 and \$961,163 for the three and six months ended June 30, 2019.

	June 30, 2020		December 31, 2019	
	Number of Shares	%	Number of Shares	%
John Barker	42,714	0.06	32,714	0.08
Stephen Randall	22,993	0.03	22,993	0.06
David McNally	4,167	0.01	4,167	0.01
John Schellhorn	294	0.00	294	0.00
Total	70,168	0.09	60,168	0.15
Common Shares Outstanding	75,581,381	100.00%	39,907,681	100.00%

11. REVENUES

On June 3, 2020, the Company entered into a License Agreement with Medtronic, whereby the Company is providing exclusive access to certain IP rights relating to robotic assisted surgical technologies. The Company is accounting for the license fee at the point in time when the rights were transferred.

12. CAPITAL MANAGEMENT

The Company is not subject to externally imposed capital requirements other than the Nasdaq stock exchange ("Nasdaq") requirement that the Company maintain a minimum bid price of \$1.00. The Company currently does not meet this requirement and has until February 1, 2021 to regain compliance otherwise the Company's securities are subject to potential delisting from Nasdaq.

13. SUBSEQUENT EVENTS

Common Stock Issued

Subsequent to June 30, 2020, 2,442,939 common shares were issued upon the exercise of warrants for gross proceeds of \$733,370 and 3,500,000 common shares were issued upon the conversion of common shares equivalents for additional proceeds of \$350.

13. SUBSEQUENT EVENTS (continued)

Stock Options

On July 30, 2020, the Company issued 22,425 stock options with an exercise price of CDN \$1.266 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years. The Company also issued 1,350,000 options to certain employees of the Company with an exercise price of US \$0.962. These options vest 25% annually over four years.

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 Company operates from two offices, one in Toronto, Ontario and a second in Chapel Hill, North Carolina. The Company’s offices were temporarily closed in March 2020 while employees continued to work virtually. In June 2020, the Company began cautious and controlled return to offices on an as needed basis and will continue to do so for the foreseeable future. The pandemic, to date, has not had a significant impact on the deliverables by the Company’s suppliers.

TITAN MEDICAL INC.
MANAGEMENT’S DISCUSSION AND ANALYSIS
FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2020
(IN UNITED STATES DOLLARS)

This Management’s Discussion and Analysis (“MD&A”) is dated August 12, 2020.

Introduction

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 consolidated financial statements for the three and six months ended June 30, 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 and six months ended June 30, 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 ability to raise sufficient financing on a timely basis, to secure and restore relationships with its suppliers and development partners and to retain qualified personnel;
- the Company’s business plan consists of the development of computer-assisted robotic surgical technologies for application in minimally invasive surgery comprising its single-port robotic surgical system;
- the Company is planning continued development of a robust 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;
- post-training assessment will include validation of the effectiveness of those assessment tools;
- 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 a 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 expectation whether the FDA will grant IDE approval on terms which allow the Company to proceed with clinical studies in the U.S. which are required for regulatory approval or clearance;
- the Company's expectation that under the FDA guidelines, the surgical system will be classified as a Class II medical device;
- the Company's belief that the FDA regulation of robotic surgical systems remains similar to how the FDA has previously approved or cleared these types of devices;
- any changes in a regulatory agency's product classification, guidance, regulatory approval route or other requirements promulgated between now and the time the Company seeks regulatory approval or clearance;
- the Company's expectation that it can, in a timely manner, produce the appropriate preclinical and clinical data required for a regulatory submission to the FDA, and Technical File for the CE mark;
- assuming the Company obtains regulatory approvals or clearances, the Company's intentions with respect to initiating marketing activities and expectation with respect to launching a commercial product in certain jurisdictions;
- the Company's plans to design, create and refine software for production system functionality of the single-port robotic surgical system and the estimated incremental costs (including the status, cost, and timing of achieving the development milestones disclosed herein);
- the indication of additional specific milestones as the development of the Company's single-port robotic surgical system progresses;
- the Company's intention to continue to assess specialized skill and knowledge requirements and recruitment of qualified personnel and partners;
- the Company's continuing efforts to secure its intellectual property by filing patent applications;
- the Company's expectations with respect to its relationship with the Key Supplier,

- 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;
- the Company will need to replace any product development service provider in the event it should be necessary or desirable to the Company;
- 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;
- the recruitment of surgeons from multiple hospital sites will be necessary to perform the surgeries, with each of these sites requiring 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 refinements and improvements;
- the Company’s intentions to complete summative human factors studies and complete the design and development of the system and initiate clinical studies;
- the surgical indications for, and the potential benefits of, the robotic surgical system;
- the Company’s ability to obtain and sustain favorable reimbursement determinations from the health authorities in each jurisdiction where products have regulatory approval or clearance to be marketed;
- the Company’s belief that the materials and parts necessary for the manufacture of a clinical-grade robotic surgical system will be available in the marketplace;
- the Company’s filing and prosecution of patent applications to expand its intellectual property portfolio as technologies are developed or refined;
- the scope of protection obtained, if any, from the Company’s current or future patent applications, as well as their expected competitive advantages;
- the Company’s seeking of licensing opportunities to expand its intellectual property portfolio;
- obtaining or maintaining trademark registrations for the marks and names the Company uses in one or more countries and the future use of such marks and names;
- the Company’s expected market segments and principal markets;
- the Company’s expectation that negative cash flow is expected to continue;
- the Company’s intention with respect to not paying any cash dividends on common shares in the foreseeable future;
- the Company’s intention to retain future earnings, if any, to finance expansion and growth;
- the Company’s industry and the markets in which it plans to operate or seeks to operate, including its general expectations and market position, market opportunities and market share;
- the Company further expanding of its patent portfolio by filing additional patent applications as it progresses in the development of robotic surgical technologies and potentially, by licensing suitable technologies;
- the Company receiving a series of payments totaling up to \$31 million for Medtronic’s license to such technologies, as technology milestones are completed and verified;
- the Company’s ability to complete the technology milestones as outlined in the Medtronic Development Agreement (as defined herein);

- the Company's anticipated developments costs;
- the need to divert important financial and human resources toward resolving delays or problems;
- the Company's plans to pay the Key Supplier in full satisfaction of the outstanding payables by the end of the current calendar year;
- the projected competitive conditions with respect to the Company's products; and
- the estimated size of the market for robotic surgical systems.

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, including those referred to in this MD&A. These risks include, but are not limited to:

- 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;
- industry competitiveness;
- operating without infringement of intellectual property rights of others;
- obtaining and enforcing patent protection for the Company's products;
- obtaining or maintaining the Company's trademarks;
- conflicts of interest;
- fluctuating financial results;
- rapidly changing markets;
- introduction of more technologically advanced products by competitors;
- potential product liability claims;
- ability to license other intellectual property rights;
- government regulation;
- modifications to products requiring new regulatory approval or clearance;
- the outcome of facility or supplier site inspections by regulatory authorities;
- extensive post-market regulation;
- the Company's products causing or contributing to a death or serious injury;
- recalls by governmental authorities;
- compliance with accounting regulations and tax rules across multiple jurisdictions;
- contingent liabilities;
- sales cycle for the Company's single-port robotic surgical system;
- uncertainty as to product development and commercialization milestones;
- uncertainties as to development and manufacturing of a commercially viable product;
- manufacturing delays, interruptions, and cost overruns;
- reliance on external suppliers and development firms;
- delays, liability, and negative perceptions from product malfunction;

- instruments, components, and accessories require repeated cleaning and sterilization;
- commercial disputes;
- additional regulatory burden and controls over financial reporting;
- fluctuations in foreign currency;
- the possibility that the Company may not be able to maintain its “foreign private issuer” status, and the possibility of delisting from the Nasdaq Capital Market (“Nasdaq”) or Toronto Stock Exchange (“TSX”);
- reduced disclosure requirements applicable to “emerging growth companies”;
- the likelihood that the Company is a “passive foreign investment company”;
- cyber-security risks and threats;
- adverse impact on the Company’s financial condition and results of operations for fiscal 2020 as a result of COVID-19;
- current global financial conditions;
- results of operations;
- difficulties with forecasting future operating results;
- profitability;
- obligations as a public company;
- stock price volatility;
- possible future sales by the Company’s shareholders of their securities;
- limited operating history of the Company;
- 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;
- enforcement of judgements against foreign persons;
- there is no market for the Company’s unlisted warrants;
- 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 or clearances as required on a timely basis to accomplish its milestones and objectives.

Forward-looking statements are based on a number of assumptions, which may prove to be incorrect, including but not limited to assumptions about:

- general business and current global economic conditions;
- ability to establish pricing and reimbursement at levels favorable to the Company;
- future success of current research and development activities;
- achieving development milestones for Medtronic or those related to its own internal development program;
- inability to achieve product cost targets;
- competition;
- changes to tax rates and benefits;
- the availability of financing on a timely basis and on terms acceptable to the Company;
- the Company’s and competitors’ costs of production and operations;
- the Company’s ability to attract and retain skilled employees;
- the Company’s ongoing relations with its third-party service providers;
- the design of the robotic surgical system and related platforms and equipment;

- the progress and timing of the development of the Company's robotic surgical system;
- costs related to the development of the Company's robotic surgical system;
- receipt of all applicable regulatory approvals/clearances;
- ability to respond to changes in the regulatory environment;
- estimates and projections regarding the robotic surgery equipment industry;
- protection of the Company's intellectual property rights;
- market acceptance of the Company's systems under development;
- the Company's ability to meet the continued listing standards of Nasdaq and the TSX;
- the type of specialized skill and knowledge required to develop the Company's robotic surgical system and the Company's access to such specialized skill and knowledge; and
- the Company's ability to meet the deliverables in accordance with the Medtronic Development and License Agreement (as defined herein).

Please also refer to the risk factors set forth starting on page 10 of the Company's annual report on Form 20-F for the 2019 fiscal year, (the "Annual Report") available on SEDAR at www.sedar.com, which are expressly incorporated by reference into this MD&A.

In addition to the risk factors listed above and those incorporated by reference in this MD&A, we are also subject to the following risks:

Development Agreement & License Agreement with Medtronic

Pursuant to the Development Agreement, Medtronic holds certain intellectual property rights to certain technology to be developed under the agreement. Under the terms of the License Agreement, the Company has granted Medtronic an exclusive license with regard to certain previously developed robotic-assisted surgical technologies while the Company has retained certain rights to the licensed technologies to continue to develop and commercialize those technologies for our own business in single-port robotic assisted surgery.

There is no assurance that the Company will receive certain payments from Medtronic pursuant to the Development Agreement with Medtronic. The Company's agreements with Medtronic provide Medtronic with certain rights to its existing intellectual property as well as intellectual property rights to certain technology to be developed under the Development Agreement. The Company's entitlement to receive up to \$31 million pursuant to the Development Agreement is conditional upon the completion of certain technology development milestones set forth in the Development Agreement. The technology development described in each of Milestones 1, 3 and 4 involves complex electromechanical design and development and there is no assurance that the milestones will be satisfied on a timely basis or at all. The technology design and development requires a combination of personnel with experience and expertise in robotic-assisted surgical technology and financial resources.

The Company may also need to re-engage its existing contractors and suppliers and certain additional contractors and suppliers and there is no assurance that those parties will all be agreeable to re-engage on terms satisfactory to the Company or at all.

Senior Secured Loan with Medtronic

The Medtronic Loan and the Note (as defined herein) may limit or preclude the Company from arranging further debt financing. Under the terms of the Note and related Security Agreement (as defined herein), the Medtronic Lender (as defined herein) has certain rights and powers that, if exercised, would have a material adverse effect on the Company's business. Due to the senior ranking of the Medtronic Lender's security interest in all of the Company's assets under the Security Agreement, the Company may be limited in, or entirely precluded from, granting a security interest in its assets in support of any further debt financing the Company may seek from any other lender. In the event that the Company seek further debt financing and it is not available due to its assets being pledged under the Security Agreement to the Medtronic Lender, the Company will need to seek financing by way of equity financing and there is no assurance that further equity financing will be available or available on acceptable terms.

Nasdaq

On August 5, 2020, the Company received notification from Nasdaq that, based on the closing bid price of its common shares for the last 30 consecutive business days, it was not in compliance with the requirement to maintain a minimum bid price of \$1 per share. The Nasdaq listing rules provide the Company a period of 180 calendar days in which to regain compliance with this requirement. If at any time during this 180 day period the closing bid price of the Company's security is at least \$1 for a minimum of 10 consecutive business days, it will have regained compliance.

In the event the Company does not regain compliance in that period, the Company may be eligible for additional time. To qualify, the Company will be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for Nasdaq, with the exception of the bid price requirement, and will need to provide written notice of its intention to cure the deficiency during the second compliance period, by effecting a share consolidation, if necessary. If the Company meets these requirements, Nasdaq may inform the Company that it has been granted an additional 180 calendar days. However, if it appears to Nasdaq that the Company will not be able to cure the deficiency, or if the Company is otherwise not eligible, Nasdaq will provide notice that its securities will be subject to delisting. There can be no assurance that the Company will be able to cure this deficiency.

COVID-19

Since December 31, 2019, the outbreak of a 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, along with the uncertainty around the disease itself, 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. Due to the uncertainty caused by the COVID-19 outbreak, the Company is experiencing difficulty in recruiting technical personnel, and travel restrictions have slowed its ability to select and qualify suppliers for certain of its products. Furthermore, contractors and suppliers engaged by the Company may also be impacted by COVID-19. The effects of these impediments on the Company's ability to achieve its milestones, including the timeline for completion, is unknown at this time.

Regulatory

The Company has not completed any regulatory submissions for marketing approval or clearance, including a submission of a premarket notification (510(k)) with the FDA, and will not do so in the foreseeable future. Further, it is not possible to predict with certainty the outcome of any regulatory agency review upon submission and the effect of that outcome on the time required to complete activities required for regulatory approval or clearance. The Company plans to submit one or more Q-Submissions to the FDA to clarify the appropriate regulatory pathway requirements for human clinical studies, and any additional special controls which the FDA may apply, including those that are deemed applicable to robotically assisted surgical devices in general. It is unclear whether the FDA will continue to allow the use of the 510(k) pathway for robotically assisted surgical devices, where device manufacturers can demonstrate that the new device is substantially equivalent to a legally marketed predicate device, or whether a De Novo classification request would be required (see below under "*Regulatory Overview*").

In the event the Company needs to proceed with a De Novo classification request, additional resources, costs and time would be required for the Company to proceed with seeking regulatory approval or clearance. Until the Company further communicates with the FDA through one or more Q-Submissions and receives feedback from the FDA, the Company cannot provide additional guidance on the regulatory process and the costs and time that may be involved, including whether it expects to or is required to proceed with a De Novo classification request.

The Company cautions that the foregoing list of important factors and assumptions is not exhaustive. Although the Company has attempted to identify on a reasonable basis important factors and assumptions related to forward-looking statements, there can be no assurance that forward-looking statements will prove to be accurate, as events or circumstances or other factors could cause actual results to differ materially from those estimated or projected and expressed in, or implied by, these forward-looking statements. 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. Accordingly, readers 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 address of the Company's corporate office and its principal place of business is 155 University Avenue, Suite 750, Toronto, Ontario, Canada M5H 3B7.

In June 2020, the Company established Titan Medical USA Inc. ("Titan USA" or "Subsidiary"), a Delaware corporation and a wholly owned subsidiary of the Company. Titan USA's principal activity consists of research and development from its premises located in Chapel Hill, North Carolina, United States.

Company Overview

The Company's business consists of the development of robotic-assisted surgical technologies for application in minimally invasive surgery ("MIS") and is presently focused on (i) the development of a single-port robotic surgical system, and (ii) the development of technology to meet the milestones under the Development Agreement with Medtronic (see below under "*Recent Developments – Development and License Arrangements with Medtronic and Senior Secured Loan*"). The single-port robotic surgical 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 control the patient cart. The Company intends to initially pursue gynecologic surgical indications for use of its single-port robotic surgical system.

With input from surgeons and operating room staff experienced in MIS, the design of the Company's robotic surgical system has been intended to include the traditional advantages of robotic-assisted surgery, including 3D imaging and instinctive control, as well as new and enhanced features, including a surgeon workstation providing an ergonomically friendly user interface and a mobile patient cart that facilitates the use of instruments with enhanced dexterity.

The single-port robotic surgical system patient cart has been designed with the goal of the 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 an articulating 3D high-definition endoscopic camera and an insertion tube with a diameter of approximately 25 millimeters that includes an integrated and independent 2D high-definition camera that, provides visualization of the MIS surgical site for optimal positioning of the insertion tube by a bedside assistant under the guidance of the surgeon. Once positioned in the body, the insertion tube would be docked to a drive unit of the patient cart and the endoscopic camera and instruments subsequently inserted and controlled by the surgeon via the workstation. The reusable instruments feature a continuous curve articulating body with an open central lumen designed to accommodate an assortment of end effectors. The use of reusable instruments that can be cleaned and sterilized between surgeries for a specific number of uses is intended to minimize the cost per procedure without compromising surgical performance. The design of the patient cart also allows for configurability for a number of surgical indications and the ability to be maneuvered within the operating room, or redeployed within hospitals and ambulatory surgical centers, where appropriate.

As part of the development of the single-port robotic surgical system, the Company plans on the continued development of a robust 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 an overview of safety. Post-training assessment will include validation of the effectiveness of those assessment tools. The Company, through the assistance of a software training system developer, has produced 14 core surgical skills simulation modules customized for use with the surgeon workstation in the first phase of the comprehensive surgeon training curriculum.

The Company has continuously evaluated its technologies under development for intellectual property protection through a combination of trade secret protection and patent application filings. While the scope of protection obtained, if any, from the Company's current or future patent applications, as well as their expected competitive advantages cannot be predicted, the Company has focused on the filing and prosecution of patents that management believes validate the novelty of its unique technology, and in turn, support the value of the entire franchise. The Company holds a number of issued patents and patent applications in respect of robotic assisted surgical technology. The Company anticipates continuing to expand its patent portfolio by filing additional patent applications as it progresses in the development of robotic surgical technologies and, potentially, by licensing suitable technologies.

Regulatory Overview

The Company has used a combination of internal resources and external development firms to execute the research, development, and regulatory plans for its single-port robotic surgical system. Development objectives were established to support a planned regulatory submission to the FDA to market its single-port robotic surgical system in the U.S., and submittal of a Technical File to a European Notified Body for achievement of the CE mark. The FDA classifies medical devices into one of three classes and the Company expects that under the current FDA guidelines, the surgical system would be classified as a Class II medical device, requiring a premarket notification (510(k)) to market the device. In Europe, the CE mark indicates that a product for sale within the European Economic Area has been assessed to conform to health, safety, and environmental protection requirements.

In the U.S., the Q-Submission Program provides companies an opportunity to interact with and obtain feedback from the FDA on planned submissions including IDE applications, 510(k) applications and De Novo classification requests. Certain Q-Submissions, termed Pre-Submissions, typically include a request for written feedback, and if the company chooses, a meeting in which additional feedback and findings are documented in meeting minutes. The recommendations made by the FDA in response to a Pre-Submission are binding, unless circumstances related to a company's product or potential risks identified through post-market surveillance of similar products in clinical use change the position of the FDA in the future. Furthermore, while the FDA encourages Q-Submissions, there is no assurance that feedback provided from these communications will result in regulatory approval, nor preclude any identified future changes in regulatory pathway.

The Company had previously confirmed with the FDA through a Pre-Submission that confirmatory human data would be required for its planned regulatory submission. The performance of surgeries in human clinical studies with the single-port robotic surgical system would require an IDE from the FDA, which must be submitted and approved in advance. Further, the recruitment of surgeons from multiple hospital sites would be necessary to perform the surgeries. Each of these sites would require approval of its IRB to approve the studies. Application to the IRB of each hospital can be made once the FDA has approved the IDE.

In the Company's recent communications with the FDA, the FDA has raised the question of whether robotically-assisted surgical devices would continue to be eligible for categorization as Class II medical devices and the 510(k) pathway, or whether De Novo classification requests be used for such devices. If the 510(k) pathway is not available to the Company, the Company intends to pursue the De Novo classification process.

The De Novo classification request provides a pathway for FDA to classify novel medical devices for which general controls, or general and special controls, provide a reasonable assurance of safety and effectiveness, but for which there is no marketed predicate device. The De Novo process allows the FDA to review a company's submission and reasons as to why the device should be a Class II device, including the review of the general and special controls that would provide reasonable assurance of the safety and effectiveness of the device. Included in such a classification request, clinical, non-clinical, test and design data may be provided to support a company's recommendation for the classification of the device as a Class II device. After the FDA receives and reviews a request, a determination (generally within 150 days) is made to either grant or decline the request. If the request is granted, (i.e. the device is determined to be a Class II device), the device is authorized to be marketed and may serve as a predicate device for future 510(k) submissions of devices of the same type. If the request is declined, and the device is therefore classified as a Class III device, a Premarket Approval (PMA) application would be required to market the device, involving a more expensive and time-consuming approval process. If the FDA declines a request due to lack of performance data, a new De Novo classification request may be submitted to provide the additional information, providing a company with additional opportunity for approval to market its device.

Since the Company has not submitted any regulatory applications, it is not possible to predict with certainty the outcome of any review by the FDA. The time required to complete activities necessary for regulatory approval or clearance is not quantifiable at this time. Therefore, the Company plans to file one or more additional Pre-Submissions with the FDA to allow it to review specific aspects of the design of the Company's surgical system, the intended use, to clarify the requirements for the IDE clinical study protocol, confirm the appropriate regulatory pathway, and understand any additional special controls which the FDA may apply.

The FDA's most recent review and response to the Company's proposed IDE clinical study general design and planning occurred in December 2018. Additional Pre-Submissions would allow the FDA to review the state of the current design of the surgical system, and the inclusion of test data and more detailed proposals for one or more clinical protocols would allow the FDA to provide additional feedback or suggest modifications if needed.

Previous results achieved by surgeons with early operating prototypes in animal and cadaver studies have validated the potential for single incision surgeries to be performed with the Company's single-port surgical system. Insights gained from these preclinical studies directed the Company to make further product improvements, which were implemented in a capital equipment engineering confidence build of an improved prototype, announced in January 2019.

In June 2019, the Company commenced preclinical live animal and cadaver studies according to Good Laboratory Practice ("GLP") and subsequently, on July 18, 2019, announced the completion of all planned GLP surgical procedures. Data from GLP surgical procedures is a necessary component for the planned IDE application to the FDA and provides valuable feedback to the Company's development objectives. Following the completion of the GLP procedures, the Company proceeded to complete human factors evaluation ("HFE") studies, which included verification of system operation with clinical users under rigorous formal (summative) HFE studies using simulated robotic manipulation exercises. In view of data gathered during case observations and valuable surgeon feedback received during the GLP and HFE preclinical studies, the Company identified opportunities for potential enhancements to the instruments, cameras and accessories associated with its single-port robotic surgical system. Specifically related to the instruments, these design improvements are expected to enhance system performance including instrument strength and agility, efficiency of actuation, and durability for reprocessing.

During the third quarter of 2019, the Company's European Notified Body also completed audits of the Company's quality system procedures and related documentation for ISO Certification.

During the fourth quarter of 2019, the Company completed two of three intended 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) complete 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 received on January 24, 2020.

Among other things, the future success of the Company is substantially dependent on funding its research and development program and design for manufacturing, including the ongoing support of outsourced research and development and manufacturing service providers. See “Recent Developments” and “Liquidity and Capital Resources”.

Development Work

The Company’s development milestones are set forth in the following table.

<i>Milestone Number</i>	<i>Development Milestones</i>	<i>Estimated Cost (in US million \$)</i>	<i>Schedule for Milestone Completion</i>	<i>Comments</i>
Milestone 1	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		Q4 2019	Completed
	Complete User Manual for robotic system setup by operating room staff and surgeon operation of surgeon workstation, patient cart, instruments and accessories		Q4 2019	Completed
	Obtain ISO 13485 Certification ¹		Q4 2019	Completed Q1- 2020
Milestone 2	Perform additional software development and test system performance	TBD	TBD	
	Implement and test improvements to instruments, camera systems and accessories			
	Perform biocompatibility testing of instruments, camera systems and accessories at independent lab			
	Perform electrical safety testing for surgeon workstations and patient cart, including electromagnetic compatibility (EMC) and electromagnetic interference (EMI) tests at independent lab			
	File Pre-Submission documentation with FDA regarding planned clinical studies			
	Update application for IDE as additional testing lab data is received and continue preparations for human confirmatory studies			
Milestone 3	Launch rebranded product line, including logos with trademark pending, literature and presentation templates, product and packaging labeling, and new website	TBD	TBD	
	Complete system software validation			
	Submit IDE application to FDA			

Milestone 4	Receive IDE approval from FDA	TBD	TBD	
	Receive approvals from IRB Committees of IDE hospitals			
	Commence human confirmatory studies under IDE protocols for FDA submittal			
Milestone 5	Complete human confirmatory studies and patient follow-up and compile reports from human confirmatory studies	TBD	TBD	
	Submit application to FDA for regulatory clearance			
	Submit Technical File to European Notified Body for review for CE mark			
	Ongoing software development and implementation			
	Planning and preparation for manufacturing and commercialization			
Milestone 6	Planning and preparation for commercialization	TBD	TBD	

An accurate estimate of the future costs of the development milestones and regulatory phases is not possible at this time. Given the uncertainty of, among other things, the Company's ability to secure required capital to fund the full development and operating costs of its single-port robotic surgical system in a timely manner, product development timelines, regulatory processes and requirements (such as confirmatory human studies), actual costs and development times will exceed those previously set forth by the Company. It is the Company's intent to have Titan USA, with the staff at its Chapel Hill, NC facility, manage and execute product development, including technical activities performed by internal resources and external development firms. There can be no assurance that the Company or its affiliates will successfully recruit in a timely manner personnel that will be capable of helping execute its product development plans.

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.

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.

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. Until the Company secures sufficient additional capital and human resources, it will not be able to fully complete the development of its robotic surgical system and there can be no assurance that the Company will be successful in securing additional financing and technical talent. Any further development of the Company's robotic surgical system is entirely contingent on the availability of financing and recruitment, and, accordingly, any future development of the Company's robotic surgical system cannot be predicted at this time.

Recent Developments

Development and License Arrangements with Medtronic and Senior Secured Loan

On June 3, 2020, the Company entered into a development and license agreement (the "Development Agreement") with a U.S. affiliate of Medtronic plc ("Medtronic") in connection with the development of robotic assisted surgical technologies and a separate license agreement (the "License Agreement") with Medtronic in respect of certain already developed Company technologies.

The Development Agreement provides for the development of robotic assisted surgical technologies for use by both Medtronic and the Company in their respective businesses through the granting of certain licenses to the intellectual property developed thereunder. In addition to retaining certain rights to commercialize the developed technologies, the Company is eligible to receive payments totaling up to U.S. \$31 million for Medtronic's license to such technologies. The payments are to be made as technology milestones are completed and verified and are further itemized in the table below.

Milestone (1)	Deadline (2)	Payment(3)	Comments
Milestone 1	Four (4) months from Development Start Date (4)	\$10,000,000	-
Milestone 2 (5)	Four (4) months from Development Start Date	-	Complete
Milestone 3	Six (6) months from the later of (a) receipt by the Company of Payment for Milestone 1, (b) receipt by the Company from Medtronic of Medtronic deliverables required for Milestone 3, and (c) receipt by the Company from Medtronic of confirmation of certain due diligence in respect of the Company's deliverables for Milestone 1	\$10,000,000	-
Milestone 4	Four (4) months from the later of (a) receipt by the Company of Payment for Milestone 3, (b) receipt by the Company of Medtronic deliverables for Milestone 4, and (c) receipt by the Company from Medtronic of confirmation of certain due diligence in respect of the Company's deliverables for Milestone 3	\$11,000,000 (6),(7)	-

Notes:

1. Milestone 1, Milestone 3, and Milestone 4 are each defined in the Development Agreement and consist of the completion of the development of certain robotic assisted surgical technologies as described in the Development Agreement.
2. All as further described and qualified in the Development Agreement.
3. Each payment is conditional upon the corresponding milestone being completed on a timely basis.
4. "Development Start Date" has the meaning ascribed to it in the Development Agreement.
5. Milestone 2 is a non-technology milestone defined as the Company raising at least \$18,000,000 of capital between the effective date of the Development Agreement and the date that is four months from the Development Start Date. The Company has met this milestone.
6. The amount of the payment will be the sum of \$10,000,000 and the amount of certain legal, transaction and intellectual property related expenses to be paid to the Company up to a maximum of \$1,000,000 pursuant to the Development Agreement and License Agreement.
7. The balance outstanding under the Medtronic Loan (described below) will be offset against the payment for Milestone 4.

The Development Agreement provides for a steering committee comprising an equal number of representatives from Titan and Medtronic to provide oversight regarding the work toward achievement of the milestones. Either party may terminate the agreement if the other party materially breaches the agreement and (if the breach is curable) fails to cure the breach within forty (40) business days after receipt of written notice.

Under the terms of the License Agreement, Medtronic was granted an exclusive license with regard to certain robotic assisted surgical technologies for a royalty payment of \$10 million, received by Titan on June 11, 2020. Titan has retained certain rights to the licensed technologies to continue to develop and commercialize those technologies for its own business in single-port robotic assisted surgery.

On April 28, 2020, the Company received a \$1.5 million senior secured loan (the "Medtronic Loan") from an affiliate of Medtronic ("Medtronic Lender") and secured by way of the security agreement ("Security Agreement") executed and delivered by the Company in favor of the Medtronic Lender. The Medtronic Loan is evidenced by an amended and restated senior secured promissory note ("Note") dated June 3, 2020, in the principal amount of \$1.5 million plus \$132,000 equal to certain legal, transaction and intellectual property related expenses incurred by Medtronic pursuant to the Medtronic agreements and will bear interest at the rate of 8% per annum. 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) June 3, 2023, (ii) a Change of Control (as defined in the Note), or (iii) the completion of the last milestone under the Development Agreement. Until repayment of the loan, Medtronic may have one non-voting observer attend meetings of the Company's Board of Directors.

The Security Agreement granted a security interest in all of the Company's present and future property including all personal property, inventory, equipment and intellectual property to the Medtronic Lender. In addition, Medtronic's rights and powers include without limitation (a) exercising and enforcing all rights and remedies of a holder of collateral as if Medtronic were the absolute owner of the collateral, (b) collection of any proceeds arising in respect of all of the Company's property pledged as security for the loan, (c) license or sublicense, whether on an exclusive or non-exclusive basis, of any of the Company's intellectual property for such term and on such conditions and in such manner as Medtronic 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.

Supplier Settlement Agreement

On June 8, 2020, the Company entered into a settlement agreement with Nagreiter Consulting, LLC (“Nagreiter”) to settle claims in a lawsuit pending in the United States District Court for the Southern District of Florida. Under the terms of the settlement agreement, Nagreiter received a sum of \$1,050,000, and Nagreiter returned to the Company certain personal property and related electronic data in its possession, and the pending litigation was dismissed.

Supplier Agreement

In 2019, one of the product development firms engaged by the Company (the “Key Supplier”) had previously suspended all work with regard to the development of the Company’s robotic surgical system during the fourth quarter of 2019 and through the second quarter of 2020 due to a lack of available funds to pay the supplier. However, as of April 30, 2020, the Company reached an agreement with the Key Supplier for the payment of outstanding payables and for the resumption of development services as needed (the “Supplier Agreement”).

Since the Company has raised additional capital in the quarter ended June 30, 2020, it plans to meet the payment requirements of the Supplier Agreement and to work toward the achievement of the milestones set forth in the Development Agreement with Medtronic as a priority. Concurrently, it is developing a work plan with input from suppliers that is consistent with the Company’s priorities toward milestone achievement related to its proprietary single-port robotic surgical system, 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 relationships with development firms, it has and continues to identify alternative suppliers of those services.

Nasdaq Requirements

On August 5, 2020, the Company received notification from Nasdaq that, based on the closing bid price of its common shares for the last 30 consecutive business days, it was not in compliance with the requirement to maintain a minimum bid price of \$1 per share. The Nasdaq listing rules provide the Company a period of 180 calendar days in which to regain compliance with this requirement. If at any time during this 180-day period the closing bid price of the Company’s security is at least \$1 for a minimum of 10 consecutive business days, it will have regained compliance. If the Company is not able to cure this deficiency within the time provided, it may be subject to delisting. See “Forward-Looking Statements – Nasdaq”.

Overall Performance

During the second half of 2019, the Company experienced a severe cash shortfall and as a result, suspended all development work associated with its single-port robotic surgical system. The cash shortfall and suspension of development continued into the first half of 2020. Following a number of offerings in the first half of 2020, the Company resumed certain product development near the end of the period and, along with its subsidiary Titan Medical USA Inc., is developing a comprehensive plan to staff its new facility in Chapel Hill, North Carolina with an emphasis on recruiting technical personnel.

In addition to resuming its product development program relating to its single-port robotic surgical system, the Company is now engaged in a second development program relating to technology to meet the milestones under the Medtronic Development Agreement. The Company has allocated its resources accordingly, to meet its commitments under each of the Development Agreement and the Note with Medtronic as well as obligations under the Supplier Agreement (see “*Recent Developments*”). The Company will require additional funding to complete its development plans relating to its single-port robotic surgical system.

Following the resumption of product development for its single-port robotic surgical system, the Company completed design enhancements to its multi-articulating instruments and end-effectors in view of the opportunities for improvements, with laboratory testing of prototypes to verify the improved design to follow. Further clinically inspired requirements for improvements to other aspects of the system are being evaluated with the overall goal of improving operating efficiencies while aiming to reduce manufacturing costs. In particular, opportunities for improvement to the interfaces between the instruments, camera systems, and sterile interfaces between them and the drive unit of the patient cart are being considered. Based on the recent improvements to the system and potential changes to the FDA requirements for data to be included in the IDE application, the Company is considering the need for further GLP and HFE preclinical studies in order to demonstrate the safety and performance of the system prior to proceeding with IDE clinical studies. If the Company determines to perform such further preclinical studies, the Company’s IDE application timeline could be delayed by several months.

During the six months ended June 30, 2020, the Company secured capital through issuances of equity, a senior secured loan and receipt of a license payment from Medtronic and these cash inflows have allowed the Company to resume certain aspects of its development program and to commence work toward milestones under the Medtronic Development Agreement. However, the Company will require additional capital in order to fully complete product development and regulatory activities at a pace that would allow accomplishment of its previously stated milestones.

During the six months ended June 30, 2020, the Company raised aggregate gross proceeds of approximately \$24,001,630 from financings (\$21,717,335 net of closing costs and cash commissions), including \$740,050 from the exercise of 3,750,000 warrants and \$800 from the conversion of common share equivalents. The Company also received a loan in the amount of \$1,500,000 evidenced by an 8% senior secured promissory note.

During the three and six months ended June 30, 2020, the Company generated revenue of \$10 million from a license agreement with Medtronic (See “*Recent Developments*”) and net and comprehensive losses of \$1,143,199 and \$1,911,242 respectively, which included research and development expenditures of \$121,463 and \$167,582, respectively, and a loss on change in fair value of warrants of \$8,782,920 and \$7,665,444 respectively, and a gain on settlement of legal action of \$1,839,626. During the three and six months ended June 30, 2019, other than the revenue from the license agreement with Medtronic, the Company generated no revenue (other than interest income on its cash deposits) and net and comprehensive losses of \$14,472,866 and \$42,755,746, which included research and development expenditures of \$18,360,674 and \$32,769,286 respectively, and a gain on change in fair value of warrants of \$6,609,952 during the three months ended June 30, 2019, and a loss in the change in fair value of warrants of \$3,866,673 for the six months ended June 30, 2019.

For the three and six months ended June 30, 2020, the Company generated an increase in net cash flows of \$26,929,538 and \$27,875,265 respectively. The increase in net cash flows for the three and six months ended June 30, 2020, is as follows: cash from operating activities of \$6,210,990 and \$3,739,366 respectively which included an initial revenue recognition of \$10,000,000 under the License Agreement with Medtronic and a loss on change in the fair value of warrants of \$8,782,920 and \$7,665,444 respectively; cash provided by financing activities of \$20,765,978 and \$24,239,459 respectively largely due to the issuance of common shares, common share equivalents and warrants and proceeds relating to the Medtronic Loan of \$1.5 million; and cash used in investing activities of \$47,430 and \$105,560 respectively from additions to patents.

For the three and six months ended June 30, 2019, the Company generated a decrease in net cash flows of \$13,290,257 and \$1,151,060, respectively. The decrease in net cash flows for the three and six months ended June 30, 2019, is as follows: cash used in operating activities of \$13,162,062 and \$32,347,015 respectively which included research and development expenses of \$18,360,674 and \$32,769,286; cash provided by financing activities of (\$2,997) and \$31,374,911 respectively from the issuance of common shares and warrants in the first quarter in 2019; and cash used in investing activities of \$125,198 and \$178,956 respectively from additions to patents.

Summary of Quarterly Results

The following is selected financial data for each of the eight most recently completed quarters, derived from the Company's Interim Financial Statements, and calculated in accordance with IFRS. Net and Comprehensive Loss (Income) figures include the effects of adjustments in the valuation of outstanding warrant liability.

	Three Months Ended June 30, 2020	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
Net Sales	\$ 10,000,000	-	-	-	-	-	-	-
Net and Comprehensive Loss (Income) from Operations	\$ 1,143,199	\$ 768,043	\$ (2,412,863)	\$ 1,564,196	\$ 14,472,866	\$ 28,282,880	\$ 8,410,702	\$ 7,534,456
Basic and Diluted Loss (Gain) per Share	\$ 0.02	\$ 0.02	\$ (0.07)	\$ 0.05	\$ 0.46	\$ 1.22	\$ 0.41	\$ 0.41

Significant changes in key financial data from the three and six months ended December 31, 2019 through the six months ended June 30, 2020 reflect the revenue recognition of the payment under the Medtronic License Agreement as well as the previous suspension of development of the Company's single-port robotic surgical system while the Company sought 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 second quarter of 2020, the Company had net and comprehensive loss of \$1,143,199 compared to a loss of \$14,472,866 for the same period in 2019. The significance of this change is primarily due to the revenue recognition of \$10,000,000 under the License Agreement with Medtronic as well as a reduction in research and development expenses from \$18,360,674 in the three months ended June 30, 2019 to \$121,463 in the same period in 2020. In addition, a loss on change in fair value of warrants of \$8,782,920 was reported in the three months ended June 30, 2020 compared to a gain on change in fair value of warrants of \$6,609,952 during the same period of 2019. The significant decrease in research and development expenditures is attributed to the reduced funding available during most of the second 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.

For the three months ended June 30, 2020, the Company generated an increase in net cash flows of \$26,929,538. The increase in net cash flows for the three ended June 30, 2020, is as follows: cash from operating activities of \$6,210,990 which included certain non-cash items of \$11,768,820 largely attributable to a non-cash warrant fair value adjustment of \$8,782,920 partially offset by a \$1,839,626 relating to the settlement of a lawsuit; cash provided by financing activities of \$20,765,978 from the issuance of common shares and warrants; and cash used in investing activities of \$47,430 from additions to patents.

For the three months ended June 30, 2019, the Company generated a decrease in net cash flows of \$13,290,257. The decrease in net cash flows for the three months ended June 30, 2019, is as follows: cash used in operating activities of \$13,162,062 which included research and development expenses of \$18,360,674; cash used in financing activities of \$2,997; and cash used in investing activities of \$125,198 from additions to patents.

Liquidity and Capital Resources

The Company currently does not generate any revenue other than interest income on its cash balances and license payments pursuant to the Development Agreement entered into by the Company and Medtronic. Accordingly, the Company is primarily dependent upon equity financing for any additional funding required for development and operating expenses and to satisfy outstanding obligations.

During the six months ended June 30, 2020, the Company raised aggregate gross proceeds of approximately \$24,001,633 from financings (\$21,717,335 net of closing costs and cash commissions), including \$740,050 from the exercise of 3,750,000 warrants and \$800 from the conversion of common share equivalents. The Company also received a loan in the amount of \$1,500,000 evidenced by an 8% senior secured promissory note.

The Company had cash and cash equivalents on hand of \$28,689,757 and accounts payable and accrued liabilities, including the current portion of lease liability, of \$8,471,270 (excluding warrant liability at June 30, 2020), compared to \$814,492 and \$11,433,967 respectively, at December 31, 2019. The Company's working capital at June 30, 2020 was \$21,746,851, excluding warrant liability, compared to a working capital deficit of \$9,684,525 at December 31, 2019.

The Company has the following contractual obligations:

Contractual Obligations existing at the date of this MD&A	Total \$	Less than 1 year	1 – 3 years	4 – 5 years	After 5 years
Capital Leases	507,813	97,392	310,120	100,301	--
Note Payable ⁽¹⁾	1,632,000	--	1,632,000	--	--
Supplier Agreement	4,715,231	4,715,231	--	--	--
Total Contractual Obligations	6,855,044	4,812,623	1,942,120	100,301	--

Note 1: On April 28, 2020, the Company issued the Note to an affiliate of Medtronic for the Medtronic Loan and executed and delivered the Security Agreement. The Note is in the principal amount of \$1.5 million plus \$132,000 equal to certain legal, transaction and intellectual property related expenses incurred by Medtronic pursuant to the Medtronic agreements. See “Recent Developments”

The table below sets forth the Company's warrants (by series) that were previously issued, and which remain outstanding as of the date of this MD&A.

	Issue Date	Expiry Date	Number Issued	Number Outstanding	Exercise Price (US\$)	Exercise Price (CDNS)
TMD.W.T.F	16-Nov-15	16-Nov-20	233,740	233,740		48.00
TMD.W.T.G	12-Feb-16	12-Feb-21	389,027	386,694		30.00
TMD.W.T.G	23-Feb-16	23-Feb-21	58,226	58,226		30.00
TMD.W.T.H	31-Mar-16	31-Mar-21	501,831	501,831		36.00
TMD.W.T.H	14-Apr-16	31-Mar-21	75,275	75,275		36.00
TMD.W.T.I	20-Sep-16	20-Sep-21	569,444	569,444		22.50
TMD.W.T.I	27-Oct-16	20-Sep-21	67,667	67,667		22.50
Not Listed	16-Mar-17	16-Mar-21	357,787	355,253		15.00
Not Listed	29-Jun-17	29-Jun-22	1,612,955	75,810		6.00
Not Listed	21-Jul-17	29-Jun-22	370,567	370,567		6.00
Not Listed	24-Aug-17	24-Aug-22	563,067	563,067		6.00
Not Listed	5-Dec-17	5-Dec-22	1,533,333	1,533,333		18.00
Not Listed	10-Apr-18	10-Apr-23	1,126,665	1,126,665		10.50
Not Listed	10-May-18	10-Apr-23	168,889	168,889		10.50
Not Listed ¹	10-Aug-18	10-Aug-23	7,679,574	6,661,068	2.920	
Not Listed ²	21-Mar-19	21-Mar-24	8,455,882	8,455,882	3.950	
Not Listed	27-Mar-20	27-Mar-25	3,500,000	-	0.190	
Not Listed	6-May-20	6-Nov-25	2,757,252	64,313	0.300	
Not Listed	10-Jun-20	10-Jun-24	9,000,000	9,000,000	1.000	
			39,021,181	30,267,724		

Note 1 - Includes a ratchet clause triggered August 29, 2019 lowering the exercise price from \$3.20 to \$2.92.

Note 2 - Includes a ratchet clause triggered August 29, 2019 lowering the exercise price from \$4.00 to \$3.95.

Financings

During Q2 2020

June 2020 Financing

On June 10, 2020, the Company completed a registered offering of 6,500,000 common shares (the "Common Shares"), 11,500,000 common share equivalents (each, a "June 2020 Common Share Equivalent") and 9,000,000 Common Share purchase warrants (each a "June 2020 Common Warrant") for total gross proceeds of approximately \$18,000,000 (\$16,500,000 net of closing cash costs including cash commissions described below). The Common Shares, June 2020 Common Share Equivalent and June 2020 Common Warrants were sold in fixed combinations at an offering price of \$1.00, consisting of one Common Share and one-half June 2020 Common Warrant or one June 2020 Common Share Equivalent and one-half June 2020 Common Warrant. Each June 2020 Common Warrant is exercisable to purchase one Common Share at an exercise price of \$1.00 per Common Share for a period of four (4) years following the date of the closing of the offering. Each June 2020 Common Share Equivalent is convertible to one Common Share at a conversion price of \$0.0001 and will expire when exercised in full.

Pursuant to the placement agent agreement entered into in respect of the offering, in addition to the cash commission of \$1,260,000, broker warrants were issued to the placement agent which entitle the holder to purchase 1,260,000 Common Shares at an exercise price of \$1.25 per share prior to expiry on June 10, 2024.

May 2020 Financing

On May 6, 2020, the Company completed a registered direct offering of 5,514,50 Common Shares of the Company at an offering price of US \$0.36268 per Common Shares and 2,757,252 unregistered Common Shares purchase warrants, resulting in 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 Shares at an exercise price of US \$0.3002 per Common Shares 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 entered into in respect of the offering, in addition to the cash commission of \$140,000, broker warrants were issued to the placement agent 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 Medtronic affiliate

On April 28, 2020, the Company received gross proceeds of \$1.5 million from the Medtronic Loan from an affiliate of Medtronic evidenced by the Note and secured by way of the Security Agreement executed and delivered by the Company in favor of the Medtronic Lender. The Note, which was amended and restated on June 3, 2020, matures on June 3, 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) June 3, 2023, (ii) a Change of Control (as defined in the Note), or (iii) the completion of the last milestone under the Development Agreement. Please also see above under “*Recent Developments – Development and License Arrangements with Medtronic and Senior Secured Loan*”.

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 \$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 \$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 entered into in respect of the offering, in addition to the cash commission of \$83,300, broker warrants were issued to the placement agent which entitle the holder to purchase 490,000 Common Shares at a price of \$0.2125 per share prior to expiry on March 25, 2025.

December 2019 Common Share Purchase Agreement

From January 3, 2020 to the date of this report, the Company raised \$2,071,930 through the sale of 4,408,048 Common Shares to an investor in accordance with the terms of a common share purchase agreement dated December 23, 2019 between the Company and the investor, under which the investor 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.

Share issuance to Contract Development Firm

On January 3, 2020, a development firm engaged by the Company purchased from the Company 501,148 common shares at a price of \$0.50 per share and the purchase price was satisfied by way of the development firm setting off \$250,574 owing the Company to the development firm for services it had previously rendered.

Comparison of Anticipated versus Actual Use of Proceeds from Financings

The following table sets forth the variances, if any, between the anticipated and actual use of proceeds from the Company's financings completed in the current financial year.

Date of Financing	Anticipated Use of Proceeds	Actual Use of Proceeds	Explanation
March 25, 2020	General corporate purposes including resuming the development of the single-port robotic surgical system, instruments, and accessories; funding working capital (including the reduction of outstanding payables); and capital expenditures.	As anticipated, including a limited amount of development activity.	none
May 6, 2020	General corporate purposes including resuming the development of the single-port robotic surgical system, instruments, and accessories; funding working capital (including the reduction of outstanding payables); and capital expenditures.	As anticipated, including a limited amount of development activity.	none
June 10, 2020	General corporate purposes including resuming the development of the single-port robotic surgical system, instruments, and accessories; funding working capital (including the reduction of outstanding payables); and capital expenditures.	As anticipated. The majority of the proceeds are still available for future periods. The Company does not anticipate alternative use of these proceeds.	none

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⁾	81,524,320
Stock options ⁽²⁾	2,627,376
Warrants	30,267,724
Broker warrants ⁽³⁾	3,265,496

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 expire 7 years following the date of the grant.
- (3) A total of 3,265,496 broker warrants previously issued in connection with offerings of securities by the Company in August 2018, March 2019, March 2020, May 2020, and June 2020 offerings 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.
 - Pursuant to the agency agreement in respect of the June 2020 offering, in addition to the cash commission paid to the agents, 1,260,000 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one common share at the price of US \$1.25 for a period of four years following the closing date.

Accounting Policies

The accounting policies set out in the notes to the Interim Financial Statements for the three and six months ended June 30, 2020 and the audited financial statements for the years ended December 31, 2019 have been applied in preparing the Interim Financial Statements for the three and six months ended June 30, 2020, and the comparative information presented in the Interim Financial Statements for the three and six months ended June 30, 2019.

The preparation of financial statements in conformity with IAS 34, Interim Financial Reporting, 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: the measurement of stock-based compensation, the fair value estimate of the initial measurement of lease and warrant liabilities and the remeasurement of unlisted warrants. While management believes that the estimates and assumptions are reasonable, actual results may differ.

The Interim Financial Statements for the three and six months ended June 30, 2020 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 as they come due during the normal course of operations for the foreseeable future. The Company has shareholders' equity of \$2,083,970 including losses for the six months ended June 30, 2020 of \$1,911,242. The working capital as at June 30, 2020 is \$21,746,851, excluding warrant liability. As a result of its recent financing activities, the Company has cash and cash equivalents of \$28,689,757 at June 30, 2020.

The Company currently does not generate any revenue (other than from its agreements with Medtronic, as defined herein - see *Recent Developments – Development and License Arrangements with Medtronic and Senior Secured Loan*) and interest income on its cash balances) and accordingly, it is primarily dependent upon equity financing for any additional funding required to complete its research and development relating to the its single-port robotic surgical system and operating expenses. While the Company is primarily dependent on equity financing for any additional funding required to complete its development plans, the Company currently has sufficient cash flow to meet its obligations over the next 12-month period. If additional funding is not available, the pace of the Company's product development plan may be reduced. These conditions indicate 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. However, management believes that the Company has sufficient funds to meet its obligations under a reduced development plan, if necessary, for the ensuing twelve months.

(a) Revenue recognition

The Company currently recognizes revenue when it has persuasive evidence of a contract, performance obligations have been identified and satisfied, payment terms have been identified, and it is probable that the Company will collect the consideration it is entitled to. On June 3, 2020, the Company entered into a License Agreement (see note 7) with a U.S. affiliate of Medtronic, whereby the Company is providing exclusive access to certain intellectual property rights relating to robotic assisted surgical technologies. The Company is accounting for the license fee at the point in time when the rights were transferred.

- Revenue from the License Agreement for intellectual property rights and know-how ("Royalty Payment") is recognized when rights are granted and customer acceptance is established. Compensation received for the performance of technology transfer services relating to the License Agreement is accounted for separately from the Royalty Payment and will be recognized at the time the service is performed.
- Revenue from the Development Agreement (see note 7) and the allocation of ownership and license rights developed under each milestone is recognized when the rights are granted and customer acceptance is established.
- Under the terms of the Development Agreement, payment is dependent on when the customer confirms completion of each milestone as defined. Due to the uncertainty of milestone achievements and entitlement of payments, the Company recognizes revenue only upon acceptance by the customer of work performed and the milestone achieved.

(b) 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.

(c) 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, March 2020 and June 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 June 30, 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 June 30, 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.

Events Subsequent to the quarter ended June 30, 2020

Common Stock Issued

Subsequent to June 30, 2020, 2,442,939 common shares were issued upon the exercise of warrants for gross proceeds of \$733,370 and 3,500,000 common share were issued upon the conversion of common shares equivalents for additional proceeds of \$350.

Stock Options

On July 30, 2020, the Company issued 22,425 stock options with an exercise price of CDN \$1.266 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years. The Company also issued 1,350,000 options to certain employees of the Company with an exercise price of US \$0.962. These options vest over 25% annually over four years.

Outlook

During the quarter ended June 30, 2020, the Company secured capital in an amount that it believes is sufficient to resume product development, but not enough to complete its product development and regulatory submission plans. Therefore, the Company is prioritizing its present work plans on first achieving the deliverables required to satisfy the criteria for license payments to be received pursuant to the Development Agreement with Medtronic, and then, selectively implementing certain design enhancements to its single-port robotic surgical system, instruments, cameras and accessories.

Pending receipt of sufficient additional capital over the course of the next twelve months, the Company expects to undertake improvements to its instruments, end-effectors and cameras, and complete software development. In addition, the Company intends to confirm with the FDA the relevant regulatory pathway through the Pre-Submission process, and initiate planning for the implementation of its IDE clinical studies.

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.

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 June 30, 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 June 30, 2020 that has materially affected, or is reasonably likely to materially affect, the issuer’s ICFR.

Date: August 12, 2020

(SIGNED) “David McNally”

David McNally
Chief Executive Officer
Titan Medical Inc.

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 June 30, 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).
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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 June 30, 2020 that has materially affected, or is reasonably likely to materially affect, the issuer’s ICFR.

Date: August 12, 2020

(SIGNED) “Stephen Randall”

Stephen D. Randall
Chief Financial Officer
Titan Medical Inc.