TITAN MEDICAL INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE THREE MONTHS ENDED MARCH 31, 2020

(IN UNITED STATES DOLLARS)

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

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

Internal Control over Financial Reporting

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

Forward-Looking Statements

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

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

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

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

Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Forward-looking statements are statements about the future and are inherently uncertain, and actual results of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, such as access to sufficient capital on a timely basis, reliance on third party suppliers, commercial disputes with third party suppliers, current global financial conditions, dependence on key personnel or management, dependence on third party contract development or manufacturing service providers, conflicts of interest, dependency on additional financing, the Company's history of losses, reliance on strategic alliances, the ability to retain key personnel in a highly-competitive employment environment, the possibility of the Company's inability to augment its management team when required, the possibility that the Company's trade secrets and confidential information may be compromised, reliance on third parties for important aspects of the Company's business, uncertainty as to product development and commercialization milestones, results of operations, competition, technological advancements, rapidly changing markets, uncertain market for the Company's products and technology, uncertainty as to the enforceability of the Company's intellectual property, infringement of intellectual property rights of others, scope and cost of insurance and uninsured risks, risks associated with the Company entering into additional long-term contractual arrangements, ability to license other intellectual property rights, government regulation, changes in market conditions and demands and preferences, changes in government policy, exposure to product liability claims, changes in accounting and tax rules, regulatory inquiries, requirements and approvals, contingent liabilities, manufacturing and product defects, stock price volatility, fluctuating financial results and currency fluctuations, uncertainty as to the Company's ability to meet its development and commercialization milestones, uncertainties as to development and manufacturing of a commercially viable product, reliance on external suppliers and development firms,

fluctuations in the market prices of the Company's securities, possible future sales by the Company's shareholders of their securities, limited operating history of the Company, the development stage of the Company and its lack of revenue or earnings, fluctuations of the Company's financial results, the possibility that the Company is not able to maintain its "foreign private issuer" status, the possibility of delisting from the Nasdaq or TSX exchanges, risks related to our working capital deficiency, risks related to a senior secured loan from a global medical technology company, risks related to our ability to resolve outstanding Naglreiter litigation, the negative impact of COVID-19 on the ability of suppliers of goods and services to provide resources in a timely manner to support the Company's milestones, the negative impact of COVID-19 on present and future demand for robotic surgeries, equipment and supplies, and the negative impact of COVID-19 on the ability of the Company to obtain regulatory approvals as required on a timely basis to accomplish its milestones and objectives.

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

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

History and Business

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

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

Overall Performance

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

the Company raising sufficient financing on a timely basis, securing and restoring relationships with its suppliers and development partners and retaining qualified personnel.

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

The Company's business plan consists of the development of computer-assisted robotic surgical technologies for application in minimally invasive surgery ("MIS") comprising its single-port robotic surgical system. The system under development includes a surgeon-controlled patient cart that includes a 3D high definition vision system and multi-articulating instruments for performing MIS procedures, and a surgeon workstation that provides the surgeon with an ergonomic interface to the patient cart including a 3D endoscopic view of the MIS procedure. The Company intends to initially pursue gynecologic surgical indications for use of its single-port robotic surgical system.

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

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

for a variety of surgical indications and the ability to be maneuvered within the operating room, or redeployed within hospitals and ambulatory surgical centers, where applicable.

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

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

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

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

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

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

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

Recent Activities

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

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

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

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

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

On March 9, 2020, the Company filed an Answer and Affirmative Defenses to the Amended Complaint and an Amended Counterclaim, denying the allegations, asserting defenses to the Amended Complaint, and bringing additional counterclaims of (i) replevin to recover possession of personal property held by Naglreiter, (ii) civil theft for depriving the Company of its right to

certain property in Naglreiter's possession and (iii) injunctive relief to have Naglreiter cease and desist the violation of confidentiality provisions in the parties' agreements.

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

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

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

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

Summary of Quarterly Results

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

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

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

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

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

Liquidity and Capital Resources

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

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

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

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

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

The Company has the following contractual obligations:

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

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

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

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

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

Development Objectives and Regulatory Plans

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

The Company has previously confirmed with the FDA that confirmatory human data will be required for its planned 510(k) regulatory submission. The performance of human surgeries with the single-port robotic surgical system will require an IDE from the FDA, which must be submitted and approved in advance. Further, the recruitment of surgeons from multiple hospital sites will be

necessary to perform the surgeries. Each of these sites will require approval of their independent Institutional Review Board ("IRB") to approve the studies.

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

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

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

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

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

Current Development Plan

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

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

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

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

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

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

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

Milestone 1, including their timing and cost.

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

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

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

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

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

Financings

Offerings Since March 31, 2020

May 2020 Financing

On May 6, 2020, the Company completed a registered direct offering pursuant to an agency agreement dated March 17, 2020 between the Company and H.C. Wainwright & Co., LLC ("Wainwright"), of 5,514,50 common shares of the Company at a per share purchase price of US $0.36268 per common share and 2,757,252 unregistered common share purchase warrants,

resulting in total gross proceeds of $2,000,000 ($1,613,800 net of estimated closing cash costs including cash commission described below). Each warrant is exercisable to purchase one common share at an exercise price of US $0.3002 per common share for a period of five and one-half (5.5) years following the date of closing of the offering.

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

Senior Secured Loan from Global Medical Technology Company

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

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

Offerings During Q1 2020

March 2020 Financing

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

Wainwright acted as the exclusive placement agent for the offering. Pursuant to the placement agency agreement, in addition to the cash commission paid to Wainwright of $83,300, broker

warrants were issued to Wainwright which entitle the holder to purchase 490,000 common shares at a price of US $0.2125 per share prior to expiry on March 25, 2025.

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

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

Off-Balance Sheet Arrangements

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

Outstanding Share Data

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

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

Notes:

(1) Refer to details of the offerings in the previous section of this document.

(2) The Company has outstanding options enabling certain employees, directors, officers and consultants to purchase common shares. Includes 25,765 stock options issued January 2020 with an exercise price of CDN $0.657 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years.

(3) A total of 2,310,174 broker warrants were issued in connection with the April 2018, August 2018, March 2019, March 2020 and May 2020 offerings. As of the date hereof, 2,005,496 broker warrants remain outstanding. Details include the following:

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

Accounting Policies

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

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

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

(a) Stock Options

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

(b) Warrant Liability

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

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

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

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

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

Related Party Transactions

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

Financial Instruments

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

Events Subsequent to the quarter ended March 31, 2020

Warrants Exercised

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

Lease Facilities

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

COVID-19

Since December 31, 2019, the outbreak of the novel strain of coronavirus, specifically identified as "COVID-19", has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and social distancing, have caused material disruption to business globally resulting in an economic slowdown. Global equity markets have experienced significant volatility and weakness. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The duration and impact of the COVID-19 outbreak is unknown at this time, as is the efficacy of the government and central bank

interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on the financial results and condition of the Company in future periods.

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

Outlook

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

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

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

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