

**TITAN MEDICAL INC.**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**FOR THE THREE MONTHS ENDED MARCH 31, 2016**  
**(IN UNITED STATES DOLLARS)**

This Management's Discussion and Analysis ("MD&A") is dated May 12, 2016.

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, 2016 (and the notes thereto) (the "Financial Statements"). The Financial Statements have been prepared in accordance with International Accounting Standards 34, Interim Financial Reporting ("IAS 34").

Additional information in respect of the Company, including the Company's most recent annual information form, can be found under the Company's profile at [www.sedar.com](http://www.sedar.com).

***Internal Control over Financial Reporting***

During the three months ended March 31, 2016, 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 "expects", "expected", "expectation", "anticipates", "believes", "intends", "estimates", "predicts", "potential", "targeted", "plans", "possible", "milestones", "objectives" and similar expressions, or statements that events, conditions or results "will", "may", "could", or "should" occur or be achieved. Forward-looking statements that appear in this MD&A include: the Company is committed to developing its robotic surgical system with the objective of substantially improving upon minimally invasive surgery; the Company aims to pursue a broad set of surgical indications for the SPORT™ Surgical System, including general abdominal, gynecologic, urologic and colorectal procedures; the SPORT™ Surgical System is being developed with the goal of inserting the interactive multi-articulating instruments and the 3D high definition vision system into the patient's body cavity through a single incision; the Company continues to explore in-licensing opportunities for technologies that may be used in conjunction with the Company's robotic surgical system; the Company anticipates expanding its patent portfolio by filing patent applications as it progresses in the development of robotic surgical technologies and by licensing suitable technologies; the Company's current plan is to focus on the development and commercialization of the SPORT™ Surgical System at estimated incremental costs and according to the timeline as set forth in the table below. Over the course of the next 12-24 months, Titan's objectives include: significantly advancing the

development of its robotic surgical system including the completion of units ready for engineering verification; the Company has decided to build additional prototypes and develop more advanced instruments and training systems for expanded use for additional surgical procedures; completion of pivotal human clinical trial and submission of 510(k) application to FDA; the Company intends to utilize a direct sales force and/or distribution partner(s) to initiate marketing the SPORT™ Surgical System to hospitals; the Company has not deviated from its plan to use the net proceeds from certain offerings towards the ongoing development and commercialization of its SPORT™ Surgical System and general working capital purposes; Titan will continue its pursuit of key strategic relationships, carrying on efforts to secure its intellectual property through the patent and licensing process; initiate human factors and usability trials, complete human factors and usability trials; optimization trials; design freeze; build design verification units; initial audit for CE mark; final CE mark audit; submit 510(k) application to FDA;

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 current global financial conditions, dependence on key personnel, conflicts of interest, obtaining of or cost of additional financing, strategic alliances, uncertainty as to product development and commercialization milestones, results of operations, competition, technological advancements, rapidly changing markets, uncertain market, uncertain acceptance of the Company's technology or intellectual property, infringement of intellectual property rights, 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 government policy, changes in accounting and tax rules, regulatory inquiries, requirements and approvals, contingent liabilities, manufacturing and product defects, history of losses, stock price volatility, future share sales, limited operating history, fluctuating financial results and currency fluctuations. Please also refer to the risk factors set forth starting on page 13 of the Company's Annual Information Form for the 2015 fiscal year, available on SEDAR at [www.sedar.com](http://www.sedar.com), which are expressly incorporated by reference into the 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, and since July 28, 2008 has been, incorporated under the *Business Corporations Act* (Ontario).

The address of the Company's corporate office and its principal place of business is 170 University Avenue, Suite 1000, Toronto, Canada M5H 3B3.

The Company was formed by way of amalgamation under the *Business Corporations Act* (Ontario) on July 28, 2008. Titan does not have any subsidiaries. The Company is committed to developing its robotic surgical system for use in connection with minimally invasive surgery (surgery without large incisions). From inception, the Company has focused on research and development toward its robotic surgical technology and building its intellectual property portfolio, trade secrets and scientific and technical knowledge base.

### ***Overall Performance***

The Company's business is focused on computer-assisted robotic surgical technologies for application in minimally invasive surgery ("MIS"). The Company is currently developing the SPORT™ (Single Port Orifice Robotic Technology) Surgical System, a single-port/single-incision robotic surgical system to provide tele-operation (remote surgery) capabilities. The SPORT™ Surgical System comprises a surgeon-controlled robotic platform (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 advanced ergonomic interface to the robotic platform and also provides a 3D endoscopic view of inside a patient's body during MIS procedures.

Development of the SPORT™ Surgical System has proceeded in response to "voice of customer" feedback and consultation with medical technology development firms engaged by the Company and the Company's Surgeon Advisory Board (the "Surgeon Advisory Board") comprised of industry-leading surgeons. This has allowed the Company to develop a robotic surgical system that will not only include the traditional advantages of robotic surgery, including tele-operation, 3D stereoscopic imaging and restoration of instinctive control, but also new and enhanced features including an advanced surgeon workstation incorporating a 3D high definition display that provides a more ergonomic-friendly user interface and a robotic platform with improved instrument dexterity. The advanced ergonomic design of the workstation also includes two custom designed master controllers, a second display for delivering ancillary information to the surgeon and elbow supports instead of forearm supports to provide an overall more comfortable working position. Overall, the design of the surgical system is intended to allow for the system to adapt to the surgeon instead of having the surgeon adapt to the system. The SPORT™ Surgical System is also being developed to allow for data collection and analytics that could be utilized by the surgeon and/or operation room teams. The Company aims to pursue a broad set of surgical indications for the SPORT™ Surgical System, including general abdominal, gynecologic, urologic and colorectal procedures.

The Company has completed research and early development of the major components of the SPORT™ Surgical System including multi-articulating instruments with multiple degrees of freedom of movement, a custom designed 3D high definition vision system capable of motorized pan and tilt, one-to-one movements and surgeon controls that allow the user to control the instruments through movements of the surgeon controllers.

In addition to development of robotic surgical technologies, the Company continues to explore in-licensing opportunities for technologies that may be used in conjunction with the Company's surgical system under development. In 2012, the Company entered into an exclusive license agreement with Columbia University for a robotic surgical technology for use in single-port surgery. The Company has exclusive license rights for the development and commercialization of the licensed technology. This technology has formed the basis of the SPORT™ Surgical System.

The SPORT™ Surgical System robotic platform is being developed with the goal of providing the interactive multi-articulating instruments and the 3D high definition vision system for insertion into a patient's body cavity through a single incision. The design of the robotic platform includes an insertion tube of approximately 19mm in diameter that is capable of being inserted into the patient's body cavity through a skin incision of approximately 25mm. The insertion tube includes a collapsible portion incorporating the 3D high definition vision system inside a camera module equipped with a digital zoom at a distal end that once inserted, is configured to deploy into a working configuration wherein the 3D high definition vision system and interactive multi-articulating instruments can be controlled by a surgeon at the workstation. The multi-articulating, snake-like instruments are designed to couple with removable and sterile single patient use robotic tools that would provide first use quality in every case and eliminate the reprocessing of the instrument. The use of reusable (re-usable for a specific number of uses) robotic instruments and single patient use tools allows more use cases for each robotic instrument thus reducing the cost per case. The robotic platform is also designed to include a mast, a boom and wheels for optimal configurability for a variety of surgical indications and the ability to be maneuvered around the operating room and surgical centers where applicable.

As part of the development of the SPORT™ Surgical System, the Company is also developing a training curriculum and post-training assessment for surgeons and surgical teams. The training curriculum includes cognitive pre-training, psychomotor skills training, team training, troubleshooting and an overview of safety. Post-training assessment includes the design of assessment tools and validating the assessment tools. The Company has entered into an agreement with the James and Sylvia Earl, Simulation to Advance Innovation and Learning (SAIL) Center at Anne Arundel Medical Center (AAMC) in Annapolis, MD, for the development of the training curriculum and post-training assessment.

The Company continuously evaluates its technologies under development for intellectual property protection through a combination of trade secrets and patent application filings. As of March 31, 2016, the Company had ownership or exclusive rights to twelve patents and twenty-eight patent applications filed with various patent offices. The Company anticipates expanding its patent portfolio by filing patent applications as it progresses in the development of robotic surgical technologies and by licensing suitable technologies.

As part of its development and commercialization efforts, the Company has established certain milestones that it uses to assess its progress towards developing commercially viable robotic surgical technologies. These milestones relate to technology and design advancements as well as to dates for clinical testing and completing 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 commercialization schedule could be

delayed and potential purchasers of its initial commercial systems may decline to purchase them or may choose to purchase alternative technologies.

Among other things, the future success of the Company is substantially dependent on its continued research and development program. In addition to being capital intensive, research and development activities relating to sophisticated technologies that the Company develops 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 a material risk that the Company’s research and development activities may not result in a functional, commercially viable product or one that is approved by regulatory authorities.

The Company completed the build of two engineering verification units in the fourth quarter of 2015. The Company had previously announced plans to build first-in-human units in the first quarter of 2016 after the completed build of the two engineering verification units. However, due to the revision of the development path, the first-in-human units will be repurposed as extended engineering verification units (“EEV units”). The EEV units were completed during the first quarter of 2016. The EEV units incorporate substantially all of the previous design and engineering work completed on the SPORT™ Surgical System and will be used for optimization trials and cadaver studies. The cadaver studies will replace the previously planned early human feasibility studies.

The cadaver studies are expected to provide more comprehensive and higher quality information in a shorter time period and to have the potential to enable earlier regulatory submission to the United States Food and Drug Administration (“FDA”).

### ***Selected Annual Information***

The following table summarizes selected financial data reported by the Company for the years ended December 31, 2015, 2014 and 2013 in accordance with International Financial Reporting Standards (“IFRS”). The information set forth should be read in conjunction with the respective audited financial statements. All amounts shown are in U.S. dollars which is the company’s functional and presentation currency.

	<b>2015</b>	<b>2014</b>	<b>2013</b>
<b>Net sales</b>	-	-	-
<b>Net and comprehensive loss for the year</b>	\$41,413,281	\$13,450,261	\$8,784,993
<b>Basic &amp; diluted loss per share</b>	\$0.40	\$0.14	\$0.12
<b>Total long term liabilities</b>	-	-	-
<b>Total assets</b>	\$12,886,310	\$35,389,436	\$3,207,171
<b>Dividends</b>	-	-	-

Significant changes in key financial data from 2013 to 2015 can be attributed to the availability of added funding and resulting development of the Company's robotic surgical system.

In 2012, the Company started the transition of its technology development to the SPORT™ Surgical System. This continued development growth was possible as a result of a number of financings completed in the last three years.

### *Discussion of Operations*

The Company incurred a net and comprehensive loss of \$11,720,394 during the three months ended March 31, 2016, compared with a net and comprehensive loss of \$9,126,268 for the three months ended March 31, 2015. This increase in net and comprehensive loss for the period is attributed primarily to the increase in ongoing spending related to the continued research and development of the SPORT™ Surgical System. In addition, foreign exchange loss in the three months ended March 31, 2016, before foreign exchange on warrant liabilities was \$90,815, compared to \$1,793,494 for the comparable periods in 2015. This reduction in foreign exchange loss of \$1,702,679 for the three months ended March 31, 2016 compared to the same period in 2015 is attributed to substantially higher Canadian dollar cash balances in 2015 when compared to 2016 and the effects of converting the 2015 Canadian dollar cash balance to U.S. dollars at unfavourably low foreign exchange rates. The Company does not currently have a formal foreign exchange hedging policy as the Company now maintains a minimum balance on hand of Canadian dollars. At March 31, 2016 the foreign exchange on the warrant liabilities was a loss of \$248,916, versus a gain of \$255,627 for the comparable period in 2015.

During the three months ended March 31, 2016, corporate efforts were ongoing related to furthering key strategic relationships, carrying on efforts to secure the Company's intellectual property through the patent and licensing process, and continuing the development of the Company's robotic surgical system. As of March 31, 2016, the Company has ownership or exclusive rights to twelve patents and twenty-eight patent applications filed with various patent offices.

Research and development expenditures (all of which were expensed in the period) for the three months ended March 31, 2016 and March 31, 2015, respectively, were as follows:

<b>Research and Development Expenditures</b>	<b>Three Months Ended March 31, 2016</b>	<b>Three Months Ended March 31, 2015</b>
Intellectual property development	\$5,000	\$5,001
License and royalties	76,000	79,383
Product development	<u>10,354,679</u>	<u>6,064,330</u>
<b>Total</b>	<u><b>10,435,679</b></u>	<u><b>\$6,148,714</b></u>

Research and development expenditures increased in the three months ended March 31, 2016 over the same period in 2015. This increase was possible due to the most recent equity financings completed in the first quarter of 2016 as well as the fourth quarter of 2015.

Excluding foreign exchange, general and administrative expenses for the three months ended March 31, 2016, amounted to \$1,147,728 compared to \$843,344 for the comparable period in 2015.

The gain (loss) attributed to change in fair value of warrants for the three months ended March 31, 2016 was gain of \$546,243, compared to loss of \$649,719 for the same period at March 31, 2015. The change in gain or (loss) of \$1,195,962 for the three months ended March 31, 2016 reflects a reduction in fair value of warrants in 2016 compared to 2015.

Titan realized \$1,774 of interest income in the three months ended March 31, 2016 and \$53,376 in the three months ended March 31, 2015. This decrease in interest income is due to the lower cash balances, as the Company advances its development of the SPORT™ Surgical System.

For a discussion with regard to the status of the development of the SPORT™ Surgical System, please see “*Development Objectives*” below.

### ***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, calculated in accordance with IFRS.

	<b>Three Months Ended March 31, 2016</b>	<b>Three Months Ended December 31, 2015</b>	<b>Three Months Ended September 30, 2015</b>	<b>Three Months Ended June 30, 2015</b>	<b>Three Months Ended March 31, 2015</b>	<b>Three Months Ended December 31, 2014</b>	<b>Three Months Ended September 30, 2014</b>	<b>Three Months Ended June 30, 2014</b>
Net sales	-	-	-	-	-	-	-	-
Net and Comprehensive Loss (gain) from operations	\$11,720,394	\$13,136,604	\$10,899,586	\$8,250,823	\$9,126,268	(\$221,995)	\$3,279,621	\$6,781,692
Basic and diluted loss per share	\$0.09	\$0.12	\$0.11	\$0.08	\$0.09	(\$0.01)	\$0.03	\$0.07

Significant changes in key financial data from the three months ended June 30, 2014 to the three months ended March 31, 2016 reflects the ongoing development of the surgeon workstation, patient cart of our SPORT™ Surgical System including a prototype for use in ongoing tissue testing. Also included 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.

### ***Liquidity and Capital Resources***

The Company currently does not generate any revenue or income (other than interest income on its cash balances) and accordingly, it is (and it will be for the foreseeable future) dependent primarily upon equity financing for any additional funding required for development and operating expenses.

The ability of the Company to arrange such 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. 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. If adequate funds are not available, or are not available on acceptable terms, the Company may not be able to take advantage of opportunities, or otherwise to continue its technology development program at its current pace.

Titan had \$12,012,081 of cash and cash equivalents on hand and accounts payable and accrued liabilities of \$6,103,785, excluding warrant liability, at March 31, 2016, compared to \$11,197,573, and \$11,159,829 respectively, at December 31, 2015. Titan's working capital as at March 31, 2016 was \$8,109,630, excluding warrant liability, compared to \$1,273,401, at December 31, 2015. The increase in working capital is primarily attributed to the prospectus qualified offerings completed in February and March, 2016. Even though Titan continues to ramp up development, accounts payable are current at March 31, 2016.

Below is a table that sets out the various series of Titan warrants that were previously issued, using historic rates. The disclosure of the potential proceeds in the last column of the table below assumes all warrants are exercised on or before the expiry date. However, there is no assurance that any warrants will be exercised prior to their expiry.

<b>Ticker Symbol</b>	<b>Issue Date</b>	<b>Expiry Date</b>	<b>Number Issued</b>	<b>Number Outstanding</b>	<b>Exercise Price (CDN \$)</b>	<b>Potential Proceeds (CDN \$)</b>
TMD.WT.A	June 21, 2011	June 21, 2016	5,577,500	5,121,500	\$2.00	10,243,000
TMD.WT.B	December 22, 2011	December 22, 2016	4,880,000	3,484,500	\$1.75	6,097,875
NOT LISTED	March 14, 2012	March 14, 2017	1,986,755	390,729	\$1.77	691,590
TMD.WT.C	March 13, 2013	March 13, 2018	6,260,763	5,260,705	\$1.25	6,575,881
TMD.WT.D	February 19, 2014	February 19, 2017	9,142,500	8,317,856	\$2.00	16,635,712
TMD.WT.E	April 23, 2014	April 23, 2017	12,203,189	12,346,914	\$2.75	33,954,014
TMD.WT.F	November 16, 2015	November 16, 2020	7,012,195	7,012,195	\$1.60	11,219,512
TMD.WT.G	February 12, 2016	February 12, 2021	11,670,818	11,600,818	\$1.00	11,600,818
TMD.WT.G	February 23, 2016	February 23, 2021	1,746,789	1,746,789	\$1.00	1,746,789
TMD.WT.H	March 24, 2016	March 24, 2021	15,054,940	15,054,940	\$1.20	18,065,928
TMD.WT.H	April 14, 2016	April 14, 2021	2,258,241	2,258,241	\$1.20	2,709,889
<b>TOTAL</b>			<b>77,793,690</b>	<b>72,595,187</b>		<b>119,541,008</b>

### ***Development Objectives***

The Company uses a combination of internal resources and external development firms to execute the research, development and commercialization plan for the Company’s robotic surgical system.

In Q1 2016, in consultation with its development firms, the Company has updated and revised the development plan for the SPORT Surgical System. This exercise was initiated in part as a result of the release on February 3, 2016 of a new guidelines document by the FDA on “Applying Human Factors and Usability Engineering to Medical Devices.” This document outlines a more detailed set of guidelines for usability and has led us to expand our usability and cadaver testing to comply with these guidelines. Other factors that impacted the change in our timeline include Titan’s participation in a two day demo in New York City for the investment community and exhibiting at SAGES and AORN conferences in March and early April.

The Company has withdrawn its current milestone chart set forth in the Company's Management's Discussion and Analysis and its Annual Information Form in respect of the year ended December 31, 2015 and its prospectus supplements respectively dated February 9, 2016 and March 24, 2016, and replaced it with one that reflects estimated timelines projected to the end of 2017 and estimated costs projected to the end of 2016 based on current information available to Management. The Company is aware of recent developments within the sector and recently published changes to the FDA guidelines, in particular as they relate to human factors and usability trials and is reviewing and analysing estimates of how these developments will impact costs. Based on new information received from the Company's development firms, total estimated costs to get to 510 (K) submission would be increased to more than double the previous estimated costs. The Company will conduct an analysis of the scope of work required to complete the projected milestones in 2017 with a view to arriving at an incremental budget for 2017 when it is able to do so with greater certainty.

The Company's current plan is to remain on the development and commercialization of the SPORT™ Surgical System at estimated incremental costs, and according to the timeline, as set forth in the table below.

The Company's development and commercialization efforts have been based on "voice of customer" feedback, consultations with external medical technology development firms and the Company's Surgeon Advisory Board. The Company is pursuing a broad set of surgical indications, including general abdominal, gynecologic, urologic and colorectal procedures for the SPORT™ Surgical System. The Company anticipates costs to the end of 2016 related to the commercialization and regulatory approval of the SPORT™ system to be as set out in the table below.

The Company's development milestones, estimated costs and schedule for completion, in each case as at March 31, 2016, are set out below.

<i>Development Milestones</i>	<i>Estimated Cost (in U.S. million \$)</i>	<i>Schedule for Milestone Completion</i>	<i>Comments</i>
<b>Units built and ready for engineering verification</b> (Prototype is formally tested to meet previously defined specifications)			
Build 2 engineering verification units	-	Q4 2015	<i>Completed</i>
Build Extended Engineering Verification, EEV, units	-	<i>Q1 2016</i>	<i>Completed</i>
Initiate Human Factors and Usability Trials	8.0	Q2 2016	<i>Initiated</i>
Complete Human Factors and Usability Trials	16.2	Q4 2016	
Optimization trials	- <sup>1</sup>	H1 2017	
Design Freeze	- <sup>1</sup>	H1 2017	
Build Design verification units	- <sup>1</sup>	H2 2017	
Initial Audit for CE Mark	- <sup>1</sup>	H2 2017	
Complete Design Verification and Validation	- <sup>1</sup>	H2 2017	
Final CE Mark Audit	- <sup>1</sup>	H2 2017	
Submit 510(K) Application to FDA	- <sup>1</sup>	H2 2017	
<b>TOTAL</b>	- <sup>1</sup>		

Note:

1. These costs have not been estimated by the Company at this time.

Upon completion of the development of the SPORT™ Surgical System and following receipt of all applicable regulatory approvals in the United States, Europe, and/or Asia, the Company intends to utilize a direct sales force and/or distribution partner(s) to initiate marketing the SPORT™ Surgical System to hospitals.

Due to the nature of technology research and development, there is no assurance that these 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 specific milestones could be identified as the research, development and commercialization of its SPORT™ 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, the availability of financing and the ability of development firms engaged by the Company to complete work assigned to them. The total costs presented in the table above to undertake the research, development and commercialization of the Company's SPORT™ Surgical System are only estimates based on current information available to the Company and cannot yet be determined with a high degree of certainty. Actual costs may be substantially higher than those estimated. Costs beyond 2016 remain to be determined.

Please also refer to the risk factors set forth starting on page 13 of the Company's Annual Information Form for the 2015 fiscal year, available on SEDAR at [www.sedar.com](http://www.sedar.com).

## *Financings*

### *Offerings During Q1 2016*

On February 12, 2016 Titan completed an offering of securities made pursuant to an agency agreement dated February 9, 2016 between the Company and Bloom Burton & Co. Limited ("**Bloom Burton**"). The Company sold 11,670,818 units under the offering at a price of CDN \$0.90 per unit for gross proceeds of approximately \$7,592,101 (\$6,844,746 net of closing costs including cash commission of \$516,622 paid in accordance with the terms of the agency agreement). Each unit consists of one common share of the Company ("Common Share") and one Common Share purchase warrant. Each whole warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of CDN \$1.00 which expire February 12, 2021. The warrants were valued at \$1,518,420 using a comparable warrant quoted in an active market, adjusted for differences in the terms of warrant and the balance of \$6,073,680 was allocated to Common Shares.

On February 23, 2016 the over-allotment option in connection with the Company's February 12, 2016 offering of 11,670,818 units was exercised in full, and the Company sold an additional 1,746,789 units at the offering price of CDN \$0.90 per unit for gross proceeds to Titan of approximately \$1,139,937 (\$1,029,710 net of closing costs including cash commission of \$79,796 paid in accordance with the terms of the agency agreement). The warrants were valued at \$215,321 using a comparable warrant quoted in an active market, adjusted for differences in the terms of warrant and the balance of \$924,616 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to Bloom Burton, the Company issued 916,443 broker warrants to Bloom Burton. Each broker warrant entitles the holder thereof to acquire one unit of the Company at the price of CDN\$0.90 for a period of 24 months following the closing date. Each unit consist of one common share of the Company and one common share purchase warrant. Each warrant entitles the holder thereof to acquire one Share of the Company at an exercise price of CDN\$1.00 for a period of 60 months from the closing date.

On March 31, 2016 Titan completed an offering of securities pursuant to an agency agreement dated March 24, 2016 between the Company and Bloom Burton. The Company sold 15,054,940 units under the offering price of CDN\$1.00 per unit for gross proceeds of approximately USD\$11,607,359 (\$10,448,982 net of closing costs including cash commission of \$796,324 paid in accordance with the terms of the agency agreement). Each unit comprises one common share of Titan and one warrant. Each whole warrant entitles its holder to purchase one additional common share of Titan for CDN\$1.20 and will expire March 31, 2021. The warrants were valued at \$1,741,104 using a comparable warrant quoted in an active market, adjusted for differences in the terms of warrant and the balance of \$9,866,255 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to Bloom Burton, the Company issued 1,032,845 broker warrants to Bloom Burton. Each broker warrant entitles the holder thereof to acquire one unit of the Company at the price of CDN\$1.00 for a period of 24 months following the closing date. Each unit consist of one common share of the Company and one common share purchase warrant. Each warrant entitles the holder thereof to acquire one Share of the Company at an exercise price of CDN\$1.20 which expire March 31, 2021.

On April 14, 2016 the over-allotment option to the Company's March 31, 2016 offering was exercised in full and the Company sold an additional 2,258,241 units at the offering price for additional gross proceeds of USD\$1,759,396 (\$1,633,407 net of closing costs including commission of \$123,158 paid in accordance with the terms of the agency agreement). The warrants were valued at \$290,300 based on the market value at the time and the balance of \$1,469,096 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to Bloom Burton, the Company issued 158,076 broker warrants to Bloom Burton. Each broker warrant entitles the holder thereof to acquire one unit of the Company at the price of CDN\$1.00 for a period of 24 months following the closing date. Each unit consist of one common share of the Company and one common share purchase warrant. Each whole warrant entitles the holder thereof to acquire one common share of the Company at an exercise price of CDN\$1.20 which expire April 12, 2021.

### ***Offerings During 2015***

On November 16, 2015 Titan completed an offering of securities pursuant to an agency agreement dated November 6, 2015 between the Company and Octagon Capital Corporation ("Octagon"). The offering consisted of 8,130,081 units and full over-allotment of 1,219,512 units for a total of 9,349,593 units at a price of CDN\$1.23 per unit for gross proceeds of US\$8,611,901 (\$7,629,360 net of closing costs including cash commission of \$586,660 paid in accordance with the terms of the agency agreement). Each unit comprised one Common Share and 0.75 of a Common Share purchase warrant. Each whole warrant entitles its holder to purchase one additional Common Share for CDN\$1.60 and will expire November 16, 2020. The warrants were valued at \$770,177 using a comparable warrant quoted in an active market, adjusted for differences in the terms of warrant and the balance of \$7,841,724 was allocated to Common Shares.

On November 23, 2015 Titan closed a non-brokered private placement of 4,290,280 common shares of Titan at a subscription price of CDN\$1.23 per common share for gross proceeds of US\$4,000,000, with Longtai Medical Inc.

Under the Agreement Titan has granted to Longtai exclusive rights to negotiate for an exclusive marketing, sales and distribution agreement for Titan's SPORT™ Surgical System in the Asia Pacific region for a period of 183 days. Longtai has paid to Titan US\$2,000,000 as a deposit toward the Distributorship Agreement, which shall be repaid to Longtai in the event that the agreement is not entered into within the 183-day period. Longtai will concurrently with the signing of the Distributorship Agreement, subscribe for and purchase an additional US\$4,000,000 worth of Common Shares at a share issue price equal to the 5-day VWAP (less a 12.5% discount). If the Distributorship Agreement is signed and the second US\$4,000,000 private placement is completed, Titan will retain US\$1,400,000 of the Distributorship Deposit and repay US\$600,000 to Longtai.

### *Utilization of Proceeds*

The utilization of proceeds as outlined in the prospectus supplements respectively dated November 6, 2015, February 9, 2016 and March 24, 2016, to the short form base shelf prospectus of the Company dated August 18, 2015 are set forth in the following table:

	Proceeds from the Offering as outlined in the prospectus supplement dated November 6, 2015 (Including the 15% overallotment)	Proceeds from the Offering as outlined in the prospectus supplement dated February 9, 2016 (Including the 15% overallotment)	Proceeds from the Offering as outlined in the prospectus supplement dated March 24, 2016 (Including the 15% overallotment)	Totals
Ongoing development and commercialization of the SPORT™ Surgical System	\$6,103,488	\$6,299,565	\$9,665,911	\$22,068,964
General working capital requirements	<u>1,525,872</u>	<u>1,574,891</u>	<u>2,416,478</u>	<u>5,517,241</u>
Total Net Proceeds	<u>\$7,629,360</u>	<u>\$7,874,456</u>	<u>\$12,082,389</u>	<u>\$27,586,205</u>

The Company has not deviated from its plan to use the net proceeds of the offerings described in the table above towards the ongoing development and commercialization of its SPORT™ Surgical System and general working capital purposes. However, in Q1 2016, the Company and its development firm, Ximedica, LLC, re-engineered and optimized the 2016 development plan. Furthermore, recent developments have occurred recently which substantially impact the

milestones, estimated costs and timelines, to the extent known or estimable by the Company. See “*Development Objectives*” above.

### ***Off-Balance Sheet Arrangements***

Other than for leased premises occupied by the Company and licensing agreements, both of which are discussed in note 8 of the unaudited condensed interim financial statements for the three months ended March 31, 2016 and 2015, the Company does not utilize off balance sheet arrangements.

### ***Outstanding Share Data***

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

<b>Type of Securities</b>	<b>Number of common shares issued or issuable upon conversion</b>
Common shares	147,398,113
Stock options <sup>(1)</sup>	3,453,055
Warrants	72,595,187
Broker warrants <sup>(2)</sup>	2,107,364

Notes:

- (1) The Company has outstanding options enabling certain employees, directors, officers and consultants to purchase common shares. Please refer to note 5(b) of the Unaudited Condensed Interim Financial Statements for terms of such options.
- (2) Pursuant to the agency agreement in respect of the February 2016 offering, in addition to the cash commission paid to the agent for the offering, 916,443 broker warrants were issued to the agent. Each broker warrant entitles the holder thereof to acquire one unit of the Company at the price of CDN\$0.90 for a period of 24 months following the closing date. Each unit consists of one Common Share and one warrant. Each warrant entitles the holder to acquire one Common Share at an exercise price of CDN\$1.00 for a period of 60 months from the date of closing.

Pursuant to the agency agreement in respect of the March 2016 offering, in addition to the cash commission paid to the Agents, 1,190,921 broker warrants were issued to the agent. Each broker warrant entitles the holder thereof to acquire one unit of the Company at the price of CDN \$1.00 for a period of 24 months following the closing date. Each unit consists of one Common Share and one warrant. Each warrant entitles the holder to acquire one Common Share at an exercise price of CDN \$1.20 per share for a period of 60 months from the date of closing.

A total of 916,443 and 1,190,921 broker warrants were issued in connection with the February 2016 offering and the March 2016 offering, respectively. As of the date hereof, all broker warrants remain outstanding.

### ***Warrant Liability***

In accordance with IAS 32, because the exercise price of new warrants are not a fixed amount, they are denominated in a currency (Canadian dollar) other than the Company’s functional currency (U.S. dollar). Accordingly, the warrants are accounted for as a derivative financial liability. The warrant liability is initially measured at fair value using a comparable warrant quoted in an active market, adjusted for differences in the terms of the warrant and subsequent changes in fair value, using the market price of warrants, are recorded through net and comprehensive loss for the period.

### ***Accounting Policies***

The accounting policies set out in the notes to the unaudited condensed interim financial statements have been applied in preparing the unaudited condensed interim financial statements for the three months ended March 31, 2016, and the comparative information presented in the unaudited condensed interim financial statements for the three months ended March 31, 2015.

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 the valuation of patent rights, the measurement of stock based compensation and the fair value estimate of the initial measurement of new warrant liabilities. While management believes that the estimates and assumptions are reasonable, actual results may differ.

### ***Fair Value***

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.

### ***Related Party Transactions***

During the three months ended March 31, 2016, 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.

On June 8, 2015, the Company entered into an option agreement (the “Technology Option Agreement”) with Platform Imaging, LLC (“Platform”) whereby Platform granted the Company an option (the “Option”) to negotiate a license agreement (“License Agreement”) to have exclusive rights to practice the inventions set forth in the patents for Markerless Tracking of Robotic Surgical Tools for incorporation in the Company’s SPORT™ Surgical System and to distribute such product thereafter. Under the terms of the Technology Option Agreement, the Company must pay to Platform a non-refundable option fee of \$300,000 as follows: (i) \$100,000 upon signing the Technology Option Agreement; (ii) \$100,000 on January 2, 2016; and (iii) \$100,000 on October 1, 2016. In addition, the Company shall have the right at any time up to and including January 2, 2017, to exercise the Option by paying a fee of \$1.3 million (the “License Fee”) for the rights under the License Agreement, payable upon execution of a License Agreement.

A senior officer of Titan is also a co-founder, significant shareholder, a director and a member of the senior management team of Platform, as well as the co-inventor of the developed technology.

During the period, an individual related to a senior executive, provided consulting services in support of marketing efforts for the European market. Monthly compensation of \$12,000 plus reimbursement of appropriate expenses was paid to the individual.

## ***Financial Instruments***

The Company's financial instruments consist of cash and cash equivalents, amounts receivable, accounts payable and accrued liabilities, warrant liability, and other liabilities and charges. 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.

## ***Management Compensation***

In the first quarter of 2016, the compensation set out below was earned by directors and officers in connection with their services as directors and officers of Titan. No other compensation arrangements were made with any director or officer of Titan during the first quarter of 2016.

### ***Officers***

<b>Name</b>	<b>Title</b>	<b>Salary</b>	<b>Stock Options</b>	<b>Total</b>
Reiza Rayman	President	\$43,964	\$6,854	\$50,818
John Hargrove	Chairman and CEO	\$51,500	\$14,323	\$65,823
Stephen Randall	CFO and Secretary	\$36,329	\$17,133	\$53,462
Dennis Fowler	Executive VP, Clinical and Regulatory Affairs	\$62,499	\$17,133	\$79,632

### ***Directors***

Independent directors of the Company are provided compensation in the form of an annual retainer, (Cdn. \$15,000) paid in advance, meeting fees (Cdn. \$1,000 per meeting) paid in arrears and an additional annual retainer for chairing committees, (Cdn. \$2,500), paid in advance.

The following table sets out the compensation earned by each of the independent directors in the first quarter of 2016. All fees and retainers to directors are satisfied through the issuance of stock options or cash payments, at the discretion of the directors, on an annual basis. Currently all directors compensation is satisfied through stock options.

<b>Name</b>	<b>Committee Chair</b>	<b>Meeting Fees</b>	<b>Total Compensation (\$)</b>
J.E. Barker <sup>(1)</sup>	\$482	\$8,820	\$9,302
Martin Bernholtz <sup>(2)</sup>	\$482	\$8,109	\$8,591
Dr. Bruce Wolff	\$0	\$8,109	\$8,109

Notes:

(1) Chairman of the compensation committee.

(2) Chairman of the audit committee.

## ***Outlook***

Titan continues to focus its efforts on the development of the SPORT™ Surgical System and is continuing to move towards commercialization. In 2015, multiple cadaver studies were performed by three members of the Surgeon Advisory Board. The procedures that were performed included abdominal hysterectomy, prostatectomy, and ureteroneocystostomy, addressing three key anatomical areas of focus for SPORT™. On December 21, 2015, the Company announced that it has completed the build of the initial SPORT™ Surgical System to include both work station and patient cart. These two units along with the EEV units will undergo extensive testing as a part of engineering verification (EV). These systems will be tested to measure performance in relation to design specifications and to measure compliance with regulatory guidelines.

Titan continues to advance its regulatory process. Titan has developed its Quality Management System in preparation for the audits leading to obtaining the CE Mark and FDA certification. As required testing is completed, the results will be incorporated into the documentation and technical files to be reviewed during the audits. All studies to support our 510(k) application for FDA approval are either ongoing or planned for the appropriate time in the development process.

On a regular basis, Titan undertakes a detailed analysis and reasonableness review of its development milestones and related cost estimates.

Over the course of the next twelve months, Titan's objectives include continuing to significantly advance the development of its robotic surgical system including the initiation and completion of human factors and usability trials and a number of planned optimization trials and cadaver studies. Currently design verification and validation, final CE mark audit and submission of the 510(k) application to the FDA are projected to occur in the second half of 2017.

Titan will continue its ongoing development, pursuit of key strategic relationships and carrying on efforts to secure its intellectual property through the patent and licensing process. The pace at which Titan can carry out ongoing development continues to be substantially dependent on its ability to raise the necessary capital on a timely basis.

## ***Additional Information***

Additional information relating to Titan, including Titan's Annual Information Form for the 2015 fiscal year, is available on SEDAR at [www.sedar.com](http://www.sedar.com).