TITAN MEDICAL INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2016

(IN UNITED STATES DOLLARS)

This Management's Discussion and Analysis ("MD&A") is dated August 15, 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 and six months ended June 30, 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").

Internal Control over Financial Reporting

During the three and six months ended June 30, 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 twelve months, Titan's main objectives include the raising of financing and the resumption of development work on the SPORT™ Surgical System; 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; if the Distributorship Agreement is executed and the second US $4,000,000 private placement is completed, the Company shall retain US $1,400,000 of the Distributorship Deposit and repay US $600,000 to Longtai; if the Shanghai Jugu Private Placement is completed, the proceeds will be used for the ongoing development and commercialization of the SPORT™ Surgical System.

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, 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 the development of 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 providing 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 a 3D endoscopic view of inside a patient's body during MIS procedures. With the SPORT™ Surgical System, the Company aims to pursue a broad set of surgical indications, including general abdominal, gynecological, urologic and colorectal 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 design a robotic surgical system that would 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 surgeon workstation user interface and a robotic platform with improved instrument dexterity. The advanced ergonomic design of the workstation also includes customized 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. The surgical system is designed 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 operating room ("OR") teams.

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's 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 a camera 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 camera 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. The camera insertion tube provides the surgeon and OR team with an image during insertion and 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 for each case and eliminate the reprocessing of tools. The use of reposable (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 June 30, 2016, the Company had ownership or exclusive rights to thirteen patents and thirty-one patent applications. 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.

On or about May 29, 2016, the Company entered into an agreement (the "Subscription Agreement") for an equity investment from Shanghai Jugu Equity Investment Fund Co. Ltd. ("Shanghai Jugu"). Under the terms of the Subscription Agreement, Shanghai Jugu agreed to subscribe for and purchase US $16,000,000 worth of Common Shares under a private placement, at a subscription price of CDN $0.746 per Common Share (the "Shanghai Jugu Private Placement").If the Shanghai JuGu Private Placement is completed the proceeds will be used for the ongoing development and commercialization of the SPORT™ Surgical System. The Common Shares will be issued pursuant to an exemption from prospectus requirements and will be subject to resale restrictions for a period of 4 months following closing of the Shanghai Jugu Private Placement under Ontario securities laws. The Subscription Agreement provides that the Shanghai Jugu Private Placement may be completed in two separate closings: (i) at the first closing, initially expected to take place by June 30, 2016, ("First Closing") the parties were to complete the issuance and purchase of 16,377,568 Common Shares; and (ii) at a second closing ("Second Closing") to occur following clearance by the TSX of a Personal Information Form (the "PIF") to be submitted by Shanghai Jugu, the parties are expected to complete the issuance and purchase of 11,506,350 Common Shares. On July 6, 2016, the TSX informed the Company that the PIF had cleared. However, Shanghai Jugu did not complete the financing in the First Closing or the Second Closing pursuant to the terms of the Subscription Agreement and requested an extension for the closing of the entire transaction. On July 18, 2016 the Company announced that it had agreed to extend the closing of the Subscription Agreement to August 15, 2016. As of the date hereof the Shanghai Jugu Private Placement has not closed and there can be no assurance that the investment from Shanghai Jugu will be completed.

Among other things, the future success of the Company is substantially dependent on continuing its research and development program, including the ongoing support of any outsourced research and development suppliers. The principal development firm and the principal manufacturing company engaged by the Company have recently expressed their concerns over the limited financing available to the Company. Both the principal development firm and the principal manufacturing company engaged by the Company have decided to temporarily suspend development work on the SPORT™ Surgical System until such time that the Company has received sufficient financing to cover current work orders and future work orders projected over a six-month period. Both companies continue to provide updating of necessary documentation and to support ongoing demonstrations of the SPORT Surgical System. 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 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. See "Risk Factors".

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").

The Company achieved its key milestone for the second quarter of 2016 with the initiation of human factor and usability trials for the SPORT™ Surgical System. The Company completed several sessions of studies with personnel from independent hospitals in which it was able to document and improve the performance of the SPORT™ Surgical System during setup, performance of the SPORT™ Surgical System during use by the nursing team during operations, and reprocessing between operations.

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.

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

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 $7,934,874 and $19,655,268 during the three and six months ended June 30, 2016, compared with a net and comprehensive loss of $8,250,823 and $17,377,091 for the three and six months ended June 30, 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 (gain) or loss in the three and six months ended June 30, 2016, before foreign exchange on warrant liabilities was $(10,542) and $101,357, compared to $(441,671) and $1,351,824 for the comparable periods in 2015. This reduction in foreign exchange loss of $1,250,467 for the six months ended June 30, 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 translating 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 June 30, 2016 the foreign exchange on the warrant liabilities was a loss of $229,214, versus a gain of $198,841 for the comparable period in 2015.

During the three and six months ended June 30, 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 June 30, 2016, the Company has ownership or exclusive rights to thirteen patents and thirty patent applications filed with various patent offices.

Research and development expenditures (all of which were expensed in the period) for the three and six months ended June 30, 2016 and June 30, 2015, respectively, were as follows:

Research and Development Expenditures	**Three Months Ended June 30, 2016**	**Six Months Ended June 30, 2016**	**Three Months Ended June 30, 2015**	**Six Months Ended June 30, 2015**
Intellectual property development	$5,000	$10,000	$4,999	$10,000
License and royalties	-	76,000	305,000	384,383
Product development	7,657,739	18,012,418	7,956,858	14,021,188
Total	$7,662,739	$18,098,418	$8,266,857	$14,145,571

Research and development expenditures increased in the six months ended June 30, 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. Research and development expenditures in the three months ended June 30, 2016 were comparable to the research and development expenditures in the same period in 2015.

Excluding foreign exchange, general and administrative expenses for the three and six months ended June 30, 2016, amounted to $1,090,126 and $2,237,854 compared to $1,052,892 and $1,896,236 for the comparable period in 2015.

The gain attributed to change in fair value of warrants for the three and six months ended June 30, 2016 was gain of $800,371 and $1,346,614, compared to gain of $659,554 and $9,836 for the same

period at June 30, 2015. The change in gain of $140,817 and $1,336,778 for the three and six months ended June 30, 2016 reflects a reduction in fair value of warrants in 2016 compared to 2015.

Titan realized $2,493 and $4,267 of interest income in the three and six months ended June 30, 2016 and $24,487 and $77,863 in the three and six months ended June 30, 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.

	Three Months Ended June 30, 2016	**Three Months Ended March 31, 2016**	**Three Months Ended December 31, 2015**	**Three Months Ended September 30, 2015**	**Three Months Ended June 30, 2015**	**Three Months Ended March 31, 2015**	**Three Months Ended December 31, 2014**	**Three Months Ended September 30, 2014**
Net sales	-	-	-	-	-	-	-	-
Net and Comprehensive Loss (gain) from operations	$7,934,874	$11,720,394	$13,136,604	$10,899,586	$8,250,823	$9,126,268	($221,995)	$3,279,621
Basic and diluted loss per share	$0.05	$0.09	$0.12	$0.11	$0.08	$0.09	($0.01)	$0.03

Significant changes in key financial data from the three months ended September 30, 2014 to the three months ended June 30, 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 $6,807,791 of cash and cash equivalents on hand and accounts payable and accrued liabilities of $9,736,659, excluding warrant liability, at June 30, 2016, compared to $11,197,573, and $11,159,829 respectively, at December 31, 2015. Titan's working capital as at June 30, 2016 was $1,147,046, excluding warrant liability, compared to $1,273,401, at December 31, 2015.

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.

Ticker Symbol	**Issue Date**	**Expiry Date**	**Number Issued**	**Number Outstanding**	**Exercise Price (CDN $)**	**Potential Proceeds (CDN $)**
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
TOTAL			72,216,190	67,473,687		109,298,008

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 the first quarter of 2016, the Company and Ximedica, LLC ("Ximedica"), the principal technology development firm engaged by the Company, re-engineered and optimized the 2016 development plan. This was done partially in view of recent developments within the robotic surgery sector and published changes to the FDA guidelines, "Applying Human Factors and Usability Engineering to Medical Devices", issued February 3, 2016, effective April 3, 2016. The Company has reviewed the FDA's new guidelines and it has incorporated additional testing procedures and documentation into its Human Factor and Usability Trials in compliance with the new guidelines. Consequently, the Company expects total costs for it to reach submission of a 510 (K) application to the FDA to increase significantly from the Company's previously published estimate. The Company has therefore withdrawn its milestone charts set forth in the Company's Management's Discussion and Analysis and AIF in respect of the year ended December 31, 2015 and those set forth in its prospectus supplements respectively dated February 9, 2016 and March 24, 2016. The amounts and timing of Titan's actual expenditures will depend upon numerous factors, including the status of its development and commercialization efforts and the amount of cash generated through any strategic collaboration into which it may enter.

The Company estimates that it will require a minimum of approximately US$16 million to fund its development milestones for 2016 and the first half of 2017, being the development milestones related to the completion of the Human Factors and Usability Trials.

Both the principal development firm and the principal manufacturing company engaged by the Company have decided to temporarily suspend development work on the SPORT^{TM} Surgical System until such time that the Company has received sufficient financing to cover current work orders and future work orders projected over a six-month period.

Accordingly, an estimate of the timing and costs for all of the development milestones beyond 2016 would be highly speculative at this time. The Company does estimate that a minimum of an additional US$65 million will be required beyond 2016 in order to reach final CE Mark audit and submission of the 510(K) application to the FDA and the actual costs may be greater than US$65 million. However, given the uncertainty of, among other things, regulatory requirements (including recent changes to the requirements of the FDA), the timing and number of future optimization trials (including cadaver studies) required, and the timing for the resumption of development work on the SPORT™ Surgical System, actual costs and development times may exceed management's current expectations and an estimate of the future costs of the regulatory phases and development milestones beyond 2016 and the first half of 2017 is not possible at this time.

The Company's current plan is to raise sufficient financing and to resume and continue the development and commercialization of the SPORT^{TM} Surgical System at estimated incremental costs, and according to the timeline, as set forth in the table on page 12.

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 and the first half of 2017 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 June 30, 2016, are set out below.

Development Milestones	*Estimated Cost (in U.S. million $)*	*Schedule for Milestone Completion*	*Comments*
Units built and ready for engineering verification (Prototype is formally tested to meet previously defined specifications)			
Build 2 engineering verification units	-	Q4 2015	*Completed*
Build Extended Engineering Verification, EEV, units	-	Q1 2016	*Completed*
Initiate Human Factors and Usability Trials	-	Q2 2016	*Completed*
Complete Human Factors and Usability Trials			
Complete EV5[(2)]	1.98	2nd Half 2016	
Complete 2 usability modules	1.96	2nd Half 2016	
Completion of initial Formative Usability Studies	3.92	2nd Half 2016	
Create and refine software for core system functionality	5.39	1st Half 2017	
Build of EV6[(2)]	2.92	1st Half 2017	
Optimization trials (including cadaver studies)	-	TBD[(1)]	
Design Freeze	-	TBD[(1)]	
Build Design verification units	-	TBD[(1)]	
Initial Audit for CE Mark	-	TBD[(1)]	
Complete Design Verification and Validation	-	TBD[(1)]	
Final CE Mark Audit	-	TBD[(1)]	
Submit 510(K) Application to FDA	-	TBD[(1)]	
TOTAL	TBD[(1)]		

Notes:

(1) The schedule for milestone completion cannot be estimated at this time pending, among other things, a resumption of development work on the SPORT™ Surgical System.

(2) EV5 and EV6 are engineering verification units of the SPORT™ Surgical System.

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 the 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 cooperation and 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 as referenced above 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.

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 and expires 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 consists 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 Common Share of the Company at an exercise price of CDN$1.20 and expires 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 consists of one Common Share of the Company and 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 March 31, 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 October 30, 2015, the Company entered into a letter agreement (the "Letter Agreement") with Longtai Medical Inc. ("Longtai"). Under the terms of the Letter Agreement, on November 23, 2015, Longtai subscribed for and purchased US $4,000,000 worth of Common Shares under a private placement, at a subscription price of CDN $1.23 per Common Share. In the Letter Agreement, the Company granted to Longtai exclusive rights to negotiate with the Company for an exclusive marketing, sales and distribution agreement for the Company's SPORT™ Surgical System in the Asia Pacific region (the "Distributorship Agreement") for a period of 183 days commencing at closing of the private placement. Additionally, Longtai paid to the Company US $2,000,000 as a deposit toward the Distributorship Agreement ("Distributorship Deposit"), which would be repaid to Longtai in the event that the Distributorship Agreement is not entered into within such 183 day period. On May 24, 2016, the Company and Longtai executed a three month extension of the exclusive rights granted to Longtai to negotiate the Distributorship Agreement and for the repayment of the Distributorship Deposit to Longtai, extending the negotiation period and the date for repayment of the Distributorship Deposit to August 19, 2016. Concurrently, Longtai has agreed that, with the signing of the Distributorship Agreement, it shall subscribe for and purchase an additional US $4,000,000 worth of Common Shares at a subscription price equal to the 5-day volume weighted average price of the Common Shares on the TSX (less a 12.5% discount). If the Distributorship Agreement is executed and the second US $4,000,000 private placement is completed, the Company shall retain US $1,400,000 of the Distributorship Deposit and repay US $600,000 to Longtai. There can be no assurance that the parties will be able to negotiate and enter into a Distributorship Agreement or that the parties will complete the additional US $4,000,000 private placement.

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 and six months ended June 30, 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:

Type of Securities	**Number of common shares issued or issuable upon conversion**
Common shares	147,398,113
Stock options[(1)]	3,453,055
Warrants	67,473,687
Broker warrants[(2)]	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 and six months ended June 30, 2016, and the comparative information presented in the unaudited condensed interim financial statements for the three and six months ended June 30, 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 and six months ended June 30, 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 second 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

Name	Title	Salary	Stock Options	Total
Reiza Rayman	President	$45,900	$5,718	$51,618
John Hargrove	Chairman and CEO	$51,500	$12,053	$63,553
Stephen Randall	CFO and Secretary	$37,921	$14,294	$52,515
Dennis Fowler	Executive VP, Clinical and Regulatory Affairs	$62,500	$15,362	$77,862

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 second 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.

Name	Committee Chair	Meeting Fees	Total Compensation ($)
J.E. Barker(1)	$487	$7,785	$8,272
Martin Bernholtz(2)	$487	$7,785	$8,272
Dr. Bruce Wolff(3)	$487	$7,785	$8,272

Notes:

(1) Chairman of the governance committee.
(2) Chairman of the audit committee.
(3) Chairman of the compensation 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 studiers 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.

Both the principal development firm and the principal manufacturing company engaged by the Company have decided to temporarily suspend development work on the SPORT™ Surgical System until such time that the Company has received sufficient financing to cover current work orders and future work orders projected over a six-month period.

Over the next twelve months, the Company plans to raise financing and to resume and continue the development and commercialization of the SPORT™ Surgical System.

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.