

TITAN MEDICAL INC.
MANAGEMENT’S DISCUSSION AND ANALYSIS
FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2015
(IN UNITED STATES DOLLARS)

This Management’s Discussion and Analysis (“MD&A”) is dated November 13, 2015.

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 nine months ended September 30, 2015 (and the notes thereto) (“Financial Statements”). The Financial Statements have been prepared in accordance with International Accounting Standards 34, Interim Financial Reporting (“IAS 34”).

Effective January 1, 2014, the Company changed its functional and presentation currency from the Canadian dollar to the U.S. dollar, applied on a prospective basis in accordance with IAS 21. This change reflects the continuing increase in the Company’s costs being incurred in U.S. dollars, a trend which is expected to continue in the foreseeable future.

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.

Internal Control over Financial Reporting

During the three and nine months ended September 30, 2015, 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 and urologic 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; Titan remains on track to attain

the next major milestone, completion of prototype units ready for engineering verification, in Q4 2015. Over the course of the next twelve to twenty four 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 an early human feasibility report; commencement of audit for CE Mark approval and pivotal human clinical trial; completion of pivotal human clinical trial and submission of 510(k) application to FDA; outside U.S. commercial launch; U.S. commercial launch; 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 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.

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 9 of the Company's Annual Information Form for the 2014 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, it 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") and is transitioning from research and development to a commercialization phase. 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 and urologic 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 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 per case cost. 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 robust 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 previously announced that it has signed 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 September 30, 2015, the Company had ownership or exclusive rights to ten patents and twenty-two 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.

On March 17, 2015 Titan announced that it completed its first quarter milestone, the design and test of a feasibility prototype. This milestone demonstrates feasibility to build a next generation workstation and advanced instruments and it enables expanded use of the SPORT™ Surgical System.

The Company continues with additional rounds of testing as the development of the surgical system progresses and is working toward the build of prototype units ready for engineering verification and first-in-human trials. The engineering verification units, which will incorporate substantially all of the design and engineering work toward the SPORT™ Surgical System, are required to be completed prior to the build of the five first-in-human units. The Company reasonably expects that it will complete the build of two engineering verification units in the fourth quarter of 2015. The first-in-human units are expected to be completed in the first quarter of 2016. The schedule for completion of the 5 first-in human units has been moved to Q1 2016 from Q4 2015 to more accurately reflect realistic completion and delivery dates in line with commencement of clinical trials. Given the progress we have made in the build of the prototype units, we now have a better understanding of the time requirements involved in the build process.

Selected Annual Information

The following table summarizes selected financial data reported by the Company for the years ended December 31, 2014, 2013 and 2012 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.

	2014	2013	2012
Net sales	-	-	-
Net and comprehensive loss for the year	\$13,450,261	\$8,784,993	\$7,293,361
Basic & diluted loss per share	\$0.14	\$0.12	\$0.11
Total long term liabilities	-	-	-
Total assets	\$35,389,436	\$3,207,171	\$5,379,007
Dividends	-	-	-

Significant changes in key financial data from 2012 to 2014 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 successful financings completed in the last three years.

Effective January 1, 2014, the Company adopted, on a prospective basis, the U.S. dollar as its functional and presentation currency. In accordance with IAS 32, because the exercise prices of the warrants issued February 19, 2014 and April 23, 2014, are not fixed amounts as they are denominated in a currency (Canadian dollar) other than the Company's functional currency (U.S. dollar), these warrants are accounted for as a derivative financial liability. The warrant liability as well as warrants issuable from the exercise of broker warrants, is initially measured at fair value and subsequent changes in fair value are recorded through Net and Comprehensive Loss for the applicable period. The fair value of these warrants is determined initially using a comparable warrant quoted in an active market, adjusted for differences in the terms of the warrants. At September 30, 2015, the warrant liability was adjusted to fair value measured at the market price of the listed warrants.

Discussion of Operations

The Company incurred a net and comprehensive loss of \$10,899,586 and \$28,276,677 during the three and nine months ended September 30, 2015, compared with a net and comprehensive loss of \$3,279,621 and \$13,672,256 for the three and nine months ended September 30, 2014. 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 nine months ended September 30, 2015 was \$(181,904) and \$971,079, compared to \$974,002 and \$43,237 for the same periods in 2014.

During the three and nine months ended September 30, 2015, 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 September 30, 2015, the Company has ownership or exclusive rights to ten patents and twenty-two patent applications filed with various patent offices.

Research and development expenditures (all of which were expensed in the period) for the three and nine months ended September 30, 2015 and September 30, 2014, respectively, were as follows:

Research and Development Expenditures	Three Months Ended September 30, 2015	Nine Months Ended September 30, 2015	Three Months Ended September 30, 2014	Nine Months Ended September 30, 2014
Intellectual property development	\$5,000	\$15,000	\$5,001	\$6,668
License and royalties	6,877	391,260	-	81,658
Product development	<u>10,682,961</u>	<u>24,704,149</u>	<u>3,109,123</u>	<u>7,089,024</u>
	10,694,838	25,110,409	3,114,124	7,177,350
Total	<u>10,694,838</u>	<u>25,110,409</u>	<u>3,114,124</u>	<u>7,177,350</u>

Research and development expenditures increased in the three and nine months ended September 30, 2015 over the same period in 2014. This increase was possible due to equity financings completed in the first and second quarters of 2014 and the efforts by the Company to advance development and related activities of the SPORT™ Surgical System.

Excluding foreign exchange, general and administrative expenses for the three and nine months ended September 30, 2015, amounted to \$826,947 and \$2,723,183 compared to \$1,004,754 and \$2,689,473 for the comparable period in 2014.

For the three and nine months ended September 30, 2015, the foreign exchange (gain) or loss was \$9,801 and \$1,361,624 before foreign exchange on warrant liabilities, compared to \$1,471,696 and \$324,313 for the comparable periods in 2014. The change in foreign exchange (gain) or loss of \$(1,461,895) and \$1,037,311 for the three and nine months ended September 30, 2015 compared to the same period in 2014 is attributed to substantially higher Canadian dollar cash balances in 2014 when compared to 2015 and the effects of converting remaining 2015 Canadian dollar cash balance to U.S. dollars at unfavourably low foreign exchange rates. The U.S. dollar was considerably stronger against the Canadian dollar at September 30, 2015 compared to September 30, 2014. 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 September 30, 2015 the foreign exchange on the warrant liabilities was a gain of \$390,546, versus a gain of \$281,076 for the comparable period in 2014.

The gain or (loss) attributed to change in fair value of warrants for the three and nine months ended September 30, 2015 was \$433,738 and \$443,574, compared to \$1,713,264 and (\$3,984,604) for the same periods at September 30, 2014. The change in gain or (loss) of \$1,279,526 and \$4,428,178 for the three and nine months ended September 30, 2015 reflects a reduction in fair value of warrants in 2015 compared to 2014.

Titan realized \$6,557 and \$84,420 of interest income in the three and nine months ended September 30, 2015 and \$99,995 and \$222,408 in the three and nine months ended September 30, 2014. 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 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	Three Months Ended June 30, 2014	Three Months Ended March 31, 2014	Three Months Ended December 31, 2013
Net sales	-	-	-	-	-	-	-	-
Net and Comprehensive Loss (gain) from operations	\$10,899,586	\$8,250,823	\$9,126,268	(\$221,995)	\$3,279,621	\$6,781,692	\$3,610,943	\$2,239,299
Basic and diluted loss per share	\$0.11	\$0.08	\$0.09	(\$0.01)	\$0.03	\$0.07	\$0.05	\$0.03

Significant changes in key financial data from the three months ended December 31, 2013 to the three months ended September 30, 2015 reflects the transition from the development and evaluation of the surgeon workstation, video system control tower and multi-port patient cart to

the commencement of a subsequent development cycle that includes the development of a single-site platform with a prototype for use in ongoing tissue testing. Also included is the ongoing impact of changing the functional and presentation currency from Canadian dollars to U.S. dollars and the requirement to revalue the Company's warrant liability at fair value with subsequent changes recorded through 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 \$10,085,394 of cash, cash equivalents and short-term investments on hand and accounts payable and accrued liabilities of \$7,407,275, excluding warrant liability at September 30, 2015, compared to \$33,923,182, and \$2,766,315 respectively, at December 31, 2014. Titan's working capital as at September 30, 2015 was \$3,644,644, excluding warrant liability, compared to \$32,259,475, at December 31, 2014. This decrease in working capital is primarily attributed to the ongoing development of the SPORT™ Surgical System. Even though we continue to ramp up development, accounts payable are current at September 30, 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	December 10, 2010	December 10, 2015	5,000,000	3,665,900	\$1.85	6,781,915
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
TOTAL			45,050,707	38,588,104		80,979,987

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.

The Company's current plan is to focus on the development and commercialization of the SPORT™ Surgical System at estimated costs and according to the timeline, set forth in the table below. As of September 30, 2015, the Company has completed its alpha commercial prototype as well as tissue testing using components of the SPORT™ Surgical System and design and testing of the feasibility prototype.

Based on "voice of customer" feedback and consultations with the medical technology development firms engaged by the Company and the Surgeon Advisory Board, the Company has decided to build additional prototypes and develop more advanced instruments and training systems for expanded use for additional surgical procedures. The Company is pursuing a broad set of surgical indications, including general abdominal, gynecologic and urologic procedures for the SPORT™ Surgical System. The Company anticipates costs related to the commercialization and regulatory approval of SPORT™ to be as set out in the table below. Certain estimated costs set out in the table below are greater than those set out in the comparable table in the Company's Annual Information Form in respect of the fiscal year ended December 31, 2014. Such additional costs are related primarily to the production of 11 engineering units, for first-in-human studies and clinical trials, to be used for regulatory approval and marketing purposes.

According to the projected development schedule, as further described in the table below, the Company reasonably expects that it will complete the build of two engineering verification units in the fourth quarter of 2015. The engineering verification units, which will incorporate substantially all of the design and engineering work toward the SPORT™ Surgical System, are required to be completed prior to the build of the five first-in-human units. The first-in-human units are expected to be completed in the first quarter of 2016 after the two engineering verification units have been completed. The schedule for completion of the 5 first-in human units has been moved to Q1 2016 from Q4 2015 to more accurately reflect realistic completion and delivery dates in line with commencement of clinical trials. Given the progress we have made in the build of the prototype units, we now have a better understanding of the time requirements involved in the build process.

The Company's development milestones, estimated costs and schedule for completion, in each case as at September 30, 2015, are set out below.

<i>Development Milestones</i>	<i>Estimated Cost (in U.S. \$)</i>	<i>Schedule for Milestone Completion</i>	<i>Comments</i>
Alpha commercial prototype design complete (Design of prototype suitable for ongoing tissue testing)	-	Q1 2014	<i>Completed</i>
Alpha commercial prototype built	-	Q2 2014	<i>Completed</i>
Tissue testing (Testing performance of individual features and functionality)	-	Q2 2014	<i>Completed</i>
Design and test of feasibility prototype complete (Demonstrate feasibility for next generation console and advanced instruments)		Q1 2015	<i>Completed</i>
Units built and ready for engineering verification (Prototype is formally tested to meet previously defined specifications)	(2 milestones)		
Build 2 engineering verification units	\$14 million	Q4 2015 <i>Expected</i>	
Build 5 first in-human units	\$9 million	Q1 2016 <i>Expected</i>	
Early human feasibility report complete (Human clinical cases utilizing units are tested under engineering verification)	\$24 million (2 milestones)	Q2 2016 <i>Expected</i>	First in human studies confirm capabilities of SPORT™ Surgical System for expanded use.
Audit for CE Mark approval commenced		Q2 2016 <i>Expected</i>	Build 4 additional human clinical trial units.
Pivotal human clinical trial commenced	\$5 million	Q3 2016 <i>Expected</i>	
Pivotal human clinical trial completed and 510(k) application submitted to FDA	\$5 million (3 milestones)	Q4 2016 <i>Expected</i>	
Outside U.S. commercial launch (Pending CE Mark approval)		Q4 2016 <i>Expected</i>	
U.S. commercial launch (Pending 510(k) market clearance)		Mid-2017 <i>Expected</i>	

<i>Development Milestones</i>	<i>Estimated Cost (in U.S. \$)</i>	<i>Schedule for Milestone Completion</i>	<i>Comments</i>
TOTAL	U.S. \$57 million		

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. The total costs to complete the research, development and commercialization of the Company's SPORT™ Surgical System as referenced above are only an estimate based on current information available to the Company and cannot yet be determined with a high degree of certainty, and the costs may be substantially higher than estimated.

Please also refer to the risk factors set forth starting on page 9 of the Company's Annual Information Form for the 2014 fiscal year, available on SEDAR at www.sedar.com.

Financings

On February 19, 2014 Titan completed an offering of securities pursuant to an agency agreement dated February 10, 2014 between the Company and Dundee Securities Ltd. ("the Agent"). The offering consisted of 7,950,000 units and full over-allotment of 1,192,500 units for a total of 9,142,500 units at a price of CDN\$1.40 per unit for aggregate gross proceeds of \$11,588,667 (\$10,608,580 net of closing costs including 6% cash commission of \$675,242 paid in accordance with the terms of the agency agreement). Each unit comprised one common share of Titan and one warrant. Each warrant entitles its holder to purchase one additional common share of Titan for CDN\$2.00 and will expire February 19, 2017. The warrants were valued at \$1,407,195 using a comparable warrant quoted in an active market, adjusted for differences in the terms of the warrant and the balance of \$10,181,472 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to the Agent, broker warrants were issued to purchase 532,710 units. Each broker warrant entitles the holder thereof to acquire one unit of the Company at the price of CDN\$1.40 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 of the Company at an exercise price of CDN\$2.00 for a period of 36 months from the date of closing.

On April 23, 2014 Titan completed an offering of securities pursuant to an agency agreement dated April 10, 2014 between the Company and Dundee Securities Ltd. ("Agent"). The offering consisted of 10,611,469 units and full over-allotment of 1,591,720 units for a total of 12,203,189 units at a price of CDN\$2.10 per unit for aggregate gross proceeds of \$23,232,936, (\$21,606,685 net of closing costs including 6% cash commission of \$1,362,426 paid in accordance with the terms of the agency agreement). Each unit comprised one common share of Titan and one warrant. Each warrant entitles its holder to purchase one additional common share of Titan for CDN\$2.75 and will expire April 23, 2017. The warrants were valued at \$3,539,901 and the balance of \$19,693,035 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to the Agent, broker warrants were issued to purchase 699,191 units. Each broker warrant entitles the holder thereof to acquire one unit of the Company at the price of CDN\$2.10 per unit 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 of the Company at an exercise price of CDN\$2.75 for a period of 36 months from the date of closing.

The utilization of proceeds as outlined in the prospectus supplements dated February 10, 2014 and April 10, 2014, respectively, to the short form base shelf prospectus of the Company dated October 15, 2012 has been updated as outlined in the following table:

	Proceeds from the Maximum Offering as outlined in the prospectus supplement dated February 10, 2014 (Including the 15% overallotment)	Proceeds from the Maximum Offering as outlined in the prospectus supplement dated April 10, 2014 (Including the 15% overallotment)	TOTAL
Ongoing development and commercialization of the SPORT™ Surgical System	\$8,486,864	\$17,285,348	\$25,772,212
General working capital requirements	<u>2,121,716</u>	<u>4,321,337</u>	<u>6,443,053</u>
Total Net Proceeds	<u>\$10,608,580</u>	<u>\$21,606,685</u>	<u>\$32,215,265</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.

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 nine months ended September 30, 2015 and 2014, 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 Management's Discussion and Analysis:

Type of Securities	Number of common shares issued or issuable upon conversion
Common shares	102,817,613
Stock options ⁽¹⁾	2,725,151
Warrants	38,588,104
Broker warrants ⁽²⁾	679,765

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 19, 2014 offering, in addition to the cash commission paid to the Agents, broker warrants were issued to purchase 532,710 units. Each broker warrant entitles the holder thereof to acquire one unit of the Company at the price of CDN\$1.40 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 of the Company at an exercise price of CDN\$2.00 per share for a period of 36 months from the date of closing.

Pursuant to the agency agreement in respect of the April 23, 2014 offering, in addition to the cash commission paid to the Agents, broker warrants were issued to purchase 699,191 units. Each broker warrant entitles the holder thereof to acquire one unit of the Company at the price of CDN\$2.10 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 of the Company at an exercise price of CDN\$2.75 per share for a period of 36 months from the date of closing.

A total of 532,710 and 699,191 broker warrants were issued relating to the February 19, 2014 and April 23, 2014 offerings respectively and as of the date of this report, 124,299 and 555,466 of these broker warrants remain outstanding.

Changes in Functional and Presentation Currency

Effective January 1, 2014, the Company adopted, on a prospective basis, the U.S. dollar as its functional and presentation currency. In accordance with IAS 32, because the exercise price of the warrants issued on February 19, 2014 and April 23, 2014, respectively, and the exercise prices of the warrants issued from the exercise of broker 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 nine months ended September 30, 2015, and the comparative information presented in the unaudited condensed interim financial statements for the three and nine months ended September 30, 2014.

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 warrants. 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 nine months ended September 30, 2015, 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.

During the period, Titan entered into an option agreement (“Option Agreement”) with a company (“Option Company”) that has developed technology for the tracking of robotic surgical tools that may be incorporated into Titan’s SPORT™ Surgical System. Under the terms of the Agreement Titan will pay to the company a non-refundable option fee of \$300,000 as follows:

<u>Amount</u>	<u>Due Date</u>
\$100,000	Upon signing the Option Agreement (paid)
\$100,000	January 2, 2016
\$100,000	October 1, 2016

In addition, Titan shall have the right at any time up to and including January 2, 2017, to enter into a five year license agreement (“License Agreement”) by exercising the Option Agreement by paying a fee of \$1.3 million (“License Fee”) for the rights to the technology. This License Fee shall be due and payable upon execution of the License Agreement.

A senior officer of Titan is also a director, a member of the Option Company’s senior management, co-inventor of the developed technology, co-founder of the Option Company and a significant shareholder of the Option Company.

Financial Instruments

The Company has designated its cash, cash equivalents and short-term investments and amounts receivable as loans and receivables, which are measured at amortized cost. Amounts receivable include HST recoverable and accrued interest. Accounts payable and accrued liabilities are classified as other financial liabilities, which are measured at amortized cost, except for warrant liability which is valued at fair value.

Management Compensation

In the third quarter of 2015, the compensation set out below was earned by directors and officers in connection with them providing services as directors and officers of Titan. No other

compensation arrangements were made with any director or officer of Titan during the third quarter of 2015.

Officers

Name	Title	Salary	Stock Options	Total
Reiza Rayman	President	\$44,847	\$5,750	\$50,597
John Hargrove	Chairman and CEO	\$51,500	\$11,654	\$63,154
Stephen Randall	CFO and Secretary	\$37,048	\$14,375	\$51,423
Dennis Fowler	Executive VP, Clinical and Regulatory Affairs	\$62,500	\$14,375	\$76,875

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 retainer for chairing committees, (Cdn. \$2,500), paid in advance. All compensation is paid by way of stock option grants.

The following table sets out the compensation earned by each of the independent directors in the third quarter of 2015. All compensation to directors is paid through the issuance of stock options, or cash, at the discretion of the directors, on an annual basis. Currently all directors compensation is paid through stock options.

Name	Meeting Fees	Total Compensation (\$)
J.E. Barker ⁽¹⁾	\$3,064	\$3,064
Martin Bernholtz ⁽²⁾	\$3,064	\$3,064
Dr. Bruce Wolff	\$3,064	\$3,064

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 its move towards commercialization. On April 16, 2015, the Company announced that effective March 31, 2015 it had signed an agreement with a worldwide supplier of endomechanical devices for the development and supply of single patient use robotic tools. Under the terms of the agreement, the supplier will create customized single patient use tools for Titan's SPORT™ Surgical System. On May 5, 2015, the Company announced that it had signed 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 a training curriculum and post-training assessment of surgeons and surgical teams who would use the SPORT™ Surgical System.

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 significantly advancing the development of its robotic surgical system including completion of prototype units for engineering verification in Q4 of 2015. In addition, Titan will undertake human clinical cases utilizing additional prototype units completed in early 2016. On September 7, 2015, the Company entered into a master services agreement with Chiltern International, Inc. ("Chiltern"), formerly Theorem CR, Inc., which will allow the parties to negotiate the provision of clinical trial research services to be provided by Chiltern to Titan from time to time, without having to re-negotiate the terms and conditions for each such service.

The Company anticipates commencing an audit for obtaining CE Mark approval in Q2 2016. As of July 30, 2015, Titan had entered into an agreement with BSI Group America Inc. ("BSI"), a recognized European Notified Body, for BSI to perform the necessary assessments so as to certify Titan's quality system for compliance with international and European requirements, as required to obtain CE Mark approval to market medical devices in the European Union.

On July 23, 2015, the Company filed with the securities regulators in Ontario, British Columbia and Alberta, a Preliminary Short Form Base Shelf Prospectus, relating to the offering for sale from time to time, during the 25 month period covered by the prospectus, securities with a total offering price of U.S. \$45 million. The securities may be offered separately or together, in amounts, at prices and on terms to be determined based on market conditions at the time of the sale and set forth in an accompanying prospectus supplement. The Company currently intends to use the net proceeds from the sale of the securities for the Company's research and development of a clinical-grade prototype of its SPORT™ Surgical System, pre-clinical trial and regulatory costs and for working capital and other general corporate purposes.

On August 18, 2015, the Company filed with the securities regulators in Ontario, British Columbia and Alberta, a Final Short Form Base Shelf Prospectus, relating to the offering for sale from time to time, during the 25 month period covered by the prospectus, securities with a total offering price of U.S. \$45 million.

On October 30, 2015, Titan announced that it had signed a Letter Agreement with Longtai Medical Inc. ('Longtai'), a Canadian subsidiary of Ningbo Long Hengtai International Trade Co. Ltd., which is incorporated under the laws of China. Under the terms of the Letter Agreement, Longtai will subscribe for and purchase US\$4,000,000 worth of Common Shares of Titan under a private placement, at a subscription price of CDN\$1.23 per share. The private placement is expected to close on or about November 15, 2015. Titan has granted to Longtai exclusive rights to negotiate with Titan for an exclusive marketing, sales and distribution agreement ("Distributorship Agreement") for Titan's SPORT™ Surgical System in the Asia Pacific region for a period of 183 days commencing at closing. Additionally, 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. Concurrently with the signing of the Distributorship Agreement, Longtai has agreed to 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 shall retain US\$1,400,000 of the deposit and repay US\$600,000 to Longtai. Based on successful negotiations, the Distributorship Agreement will further lead to an additional US\$15,000,000 investment by Longtai. The investment proceeds will be used for the establishment and support of a Titan operation office and facility in the Asia Pacific Region; establishment of a training program for the SPORT system; sales and marketing of the SPORT.

On November 6, 2015, Titan announced that it had filed a prospectus supplement to the Company's short form base shelf prospectus dated August 18, 2015, regarding its previously announced public offering of units of the Company. Each unit shall consist of one common share of the Company and 0.75 of a common share purchase warrant. Each whole warrant shall entitle the holder thereof to acquire one Share of the Company at a price of CDN\$1.60 for a period of 5 years following the closing of the offering. Octagon Capital Corporation and the Company's U.S. placement agent have agreed to sell, on a best efforts agency basis, up to 8,130,081 Units at a price of CDN \$1.23 per Unit for total gross proceeds of up to CDN \$10,000,000. The Agent has been granted the option to offer for sale additional units at the price issued under the Offering and additional warrants at a price of CDN \$0.21 per over-allotment warrant, exercisable in whole or in part at any time on the closing date or up to 30 days following the closing date, so long as the aggregate number of over-allotment units and over-allotment warrants does not exceed 15% of the number of units issued under the offering. The offering is subject to a number of conditions, including, without limitation, receipt of all regulatory approvals.

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.

Additional Information

Additional information relating to Titan, including Titan's Annual Information Form for the 2014 fiscal year, is available on SEDAR at www.sedar.com.