

A copy of this preliminary short form prospectus has been filed with the securities regulatory authorities in each of the Provinces of British Columbia, Alberta and Ontario but has not yet become final for the purpose of the sale of securities. Information contained in this preliminary short form prospectus may not be complete and may have to be amended. The securities may not be sold until a receipt for the short form prospectus is obtained from the securities regulatory authorities.

No securities regulatory authority has expressed an opinion about these securities and it is an offence to claim otherwise.

The securities to be offered hereunder have not been, and will not be, registered under the United States Securities Act of 1933, as amended (the “U.S. Securities Act”) or the securities laws of any state of the United States. Accordingly, these securities may not be offered or sold within the “United States” or to or for the account or benefit of “U.S. Person”, as such terms are defined in Regulation S under the U.S. Securities Act, except pursuant to transactions exempt from registration under the U.S. Securities Act and under applicable state securities laws. This short form prospectus does not constitute an offer to sell or a solicitation of an offer to buy any of these securities within the United States or its territories or possessions.

Information has been incorporated by reference in this short form prospectus from documents filed with the securities commissions or similar authorities in the Canadian provinces of British Columbia, Alberta and Ontario. Copies of the documents incorporated herein by reference may be obtained on request without charge from the Chief Financial Officer of Titan Medical Inc. at Suite 1000, 170 University Avenue, Toronto, Ontario, M5H 3B3, Telephone: (416) 548-7522 and are also available electronically at www.sedar.com.

PRELIMINARY SHORT FORM PROSPECTUS

New Issue

June 8, 2017



TITAN MEDICAL INC.

Minimum: US \$8,600,000 ([●] Units)

Maximum: US \$17,300,000 ([●] Units)

Price: US \$[●] per Unit

Titan Medical Inc. (the “Company” or “Titan” or “we” or “our”) is hereby qualifying for distribution a minimum (the “Minimum Offering”) of [●] units of the Company (the “Units”) and a maximum (the “Maximum Offering”) of [●] Units, at a price of US \$[●] per Unit (the “Offering Price”). Each Unit consists of (i) one common share of the Company (an “Offered Share”); (ii) one-half of one common share purchase warrant of the Company (a “2019 Warrant”), each whole 2019 Warrant entitling the holder thereof to purchase one common share of the Company (a “2019 Warrant Share”) at an exercise price of US \$[●] per 2019 Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the date that is 24 months after the closing of the Offering (as defined herein); and (iii) one-half of one common share purchase warrant of the Company (a “2021 Warrant” and, together with the 2019 Warrants, the “Warrants”), each whole 2021 Warrant entitling the holder thereof to purchase one common share of the Company (a “2021 Warrant Share” and, together with the 2019 Warrant Shares, the “Warrant Shares”) at an exercise price of US \$[●] per 2021 Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the date that is 48 months after the closing of the Offering. The Units will immediately separate into Offered Shares, 2019 Warrants and 2021 Warrants upon issuance. The distribution of the Units and the Broker Warrants (as defined herein) qualified by this short form prospectus is referred to herein as the “Offering”. See “Description of Offered Securities”.

The outstanding common shares of Titan (“Common Shares”) are listed and posted for trading on the Toronto Stock Exchange (the “TSX”) under the symbol “TMD” and on the OTCQB market in the United States under the symbol “TITXF”. On June 7, 2017, the last trading day prior to the date of this short form prospectus, the closing price of the Common Shares on the TSX was CDN \$0.345. The Corporation intends to apply to list the Offered Shares, the Warrant Shares and the Broker Warrant Shares (as defined herein) distributed under this short form prospectus on the TSX. Listing will be subject to the Company fulfilling all of the listing requirements of the TSX. **The Company has not applied and does not intend to apply to list the Warrants on any securities exchange. There will be no**

market through which the Warrants may be sold and purchasers may not be able to resell the Warrants purchased in the Offering. This may affect the pricing of the Warrants in the secondary market, the transparency and availability of trading prices, the liquidity of the Warrants, and the extent of issuer regulation. See “Risk Factors”.

The Offering Price was determined by negotiation between the Company and Bloom Burton Securities Inc. (the “Canadian Agent”) and Maxim Group LLC and WallachBeth Capital LLC, United States registered broker-dealers (the “US Agents” and together with the Canadian Agent, the “Agents”). Pursuant to the terms of an agency agreement (the “Agency Agreement”) to be entered into between the Company and the Agents, the Units will be issued and sold in the Provinces of British Columbia, Alberta and Ontario by the Canadian Agent, acting as the Company’s agent, and the Units will also be offered for sale in the United States, by or through the US Agents, acting as the Company’s agents, under certain exemptions from the registration requirements of the U.S. Securities Act and the applicable state laws. See “Plan of Distribution”.

An investment in the securities offered hereunder is speculative and involves a high degree of risk. The risk factors identified in this short form prospectus and the documents incorporated by reference herein and therein should be carefully reviewed and evaluated by prospective investors before purchasing the securities being offered hereunder. See “Risk Factors” in this short form prospectus and the documents incorporated by reference herein and therein.

Price: US \$[●] per Unit		
	Price to the Public	Net Proceeds to the Company ⁽²⁾
Per Unit ⁽³⁾	US \$[●]	US \$[●]
Minimum Offering.....	US \$[●]	US \$[●]
Maximum Offering.....	US \$[●]	US \$[●]

Notes:

- (1) The Company has agreed to pay the Agents a commission (the “Agents’ Commission”) of 7% of the aggregate gross proceeds of the Offering (or US \$[●] per Unit) sold by the Agents, excluding the gross proceeds raised through the sale of Units to certain subscribers identified by the Company on a list provided to the Agents and settling directly with the Company (the “President’s List Subscribers”). In addition to the Agents’ Commission, the Company will issue to the Agents compensation warrants (“Broker Warrants”) to purchase such number of Common Shares (the “Broker Warrant Shares”) as is equal to 7% of the aggregate number of Units issued pursuant to the Offering (but excluding those Units issued to President’s List Subscribers). Each Broker Warrant shall entitle the Agents to acquire one Broker Warrant Share at US \$[●], subject to adjustment, for a period of 24 months following the Closing Date (as defined herein). See “Plan of Distribution”. This short form prospectus also qualifies the distribution of the Broker Warrants.
- (2) After deducting the Agents’ Commission, but before deducting expenses of the Offering (including listing fees) estimated to be approximately US \$[●] in the event of the Minimum Offering, and US \$[●] in the event of the Maximum Offering, which will be paid from the proceeds of the Offering.
- (3) From the Offering Price per Unit, the Company will allocate US \$[●] to each Offered Share, US \$[●] to each one-half 2019 Warrant and US \$[●] to each one-half 2021 Warrant.
- (4) Assuming no President’s List Subscriber participates in the Offering.

The following table sets out the number of compensation securities that have been issued or may be issued by the Company to the Agents:

Agents’ Position	Minimum Offering	Maximum Offering	Exercise Period	Exercise Price
Broker Warrants	Up to [●] Broker Warrants ⁽¹⁾	Up to [●] Broker Warrants ⁽¹⁾	Up to 24 months following the Closing Date ⁽²⁾	US \$[●] per Broker Warrant

Note:

- (1) Assuming no President’s List Subscriber participates in the Offering.
- (2) Refers to the period during which the Agents may convert the Broker Warrants into Common Shares.

Subscriptions for Units will be received by the Agents subject to rejection or allotment in whole or in part, and the right is reserved to close the subscription books at any time without notice. Closing of the Offering is expected to occur on or about [●], 2017 or such earlier or later date as the Company and the Agents may agree (the “Closing

Date”). Global certificates or an instant deposit through the non-certificated inventory system representing the Offered Shares and Warrants comprising the Units will be issued and deposited with CDS Clearing and Depository Services Inc. (“CDS”). A subscriber who purchases Units will receive only a customer confirmation from the registered dealer who is a CDS participant from or through whom Units are purchased. Physical certificates evidencing Offered Shares and Warrants will not be issued except in limited circumstance and unless a request for a certificate is made to the Company. Physical certificates evidencing the Offered Shares and Warrants will be distributed to purchasers in the United States who meet the definition of institutional “accredited investors” as defined in Rule 501(a)(1), (2), (3) or (7) (each a “U.S. Institutional Accredited Investor”) of Regulation D under the U.S. Securities Act. See “Plan of Distribution”.

The Offering is not underwritten or guaranteed by any person. The Canadian Agent conditionally offers the Units pursuant to the securities legislation of the Provinces of British Columbia, Alberta and Ontario on a best efforts basis and, subject to prior sale, if, as and when issued by the Company and delivered and accepted by the Canadian Agent in accordance with the conditions contained in the Agency Agreement referred to under “Plan of Distribution” and subject to approval of certain legal matters on behalf of the Company by Borden Ladner Gervais LLP and on behalf of the Canadian Agent by Baker & McKenzie LLP. The US Agents will not, directly or indirectly, solicit offers to purchase or sell the Offered Shares in Canada.

The Offered Shares, Warrants and the Warrant Shares have not been and will not be registered under the U.S. Securities Act or any securities or “blue sky” laws of any of the states of the United States, and may not be offered or sold, directly or indirectly, within the United States or to, or for the account or benefit of, U.S. persons except in accordance with an exemption from the registration requirements of the U.S. Securities Act and applicable state securities laws.

You should rely only on the information contained or incorporated by reference in this short form prospectus and the documents incorporated by reference herein and therein. The Company and the Agents have not authorized anyone to provide purchasers with information different from that contained or incorporated by reference in this short form prospectus and the documents incorporated by reference herein and therein. Information contained on the website of the Company shall not be deemed to be a part of this short form prospectus or incorporated herein by reference and should not be relied upon by prospective investors for the purpose of determining whether to invest under the Offering. Investors should rely only on the information contained in or incorporated by reference into this short form prospectus. The Company is offering to sell, and seeking offers to buy, the Units only in jurisdictions where, and to persons to whom, offers and sales are lawfully permitted. The Company does not undertake to update information contained or incorporated by reference in this short form prospectus, except as required by applicable securities laws.

David McNally, President and Chief Executive Officer of the Company, and Dr. Bruce Wolff, a director of the Company, each resides outside of Canada and has appointed the Company as his agent for service of process. Purchasers are advised that it may not be possible for investors to enforce judgements obtained in Canada against any person or company that is incorporated, continued or otherwise organized under the laws of a foreign jurisdiction or resides outside of Canada, even if the party has appointed an agent for service of process.

Prospective investors should be aware that the acquisition or disposition of the securities described herein may have tax consequences in Canada. This short form prospectus may not describe these tax consequences fully. You should consult and rely on your own tax advisor with respect to your own particular circumstances. See “Certain Canadian Federal Income Tax Considerations”.

The Company’s head and registered office is located at Suite 1000, 170 University Avenue, Toronto, Ontario, M5H 3B3 and its telephone number is 416-548-7522.

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IMPORTANT NOTICE ABOUT THE INFORMATION IN THIS SHORT FORM PROSPECTUS

General Advisory

You should rely only on the information contained in or incorporated by reference in this short form prospectus. We have not and the Agents have not authorized anyone to provide you with different or additional information. We are not and the Agents are not making an offer of the Units in any jurisdiction where the offer is not permitted by law. If anyone provides you with any different or inconsistent information, you should not rely on it. You should not assume that the information contained in or incorporated by reference in this short form prospectus is accurate as of any date other than the date on the front of this short form prospectus with respect to information contained herein and, with respect to information incorporated by reference, the date of such document so incorporated. The Company's business, financial condition, results of operations and prospects may have changed since those dates.

Market and Industry Data

Unless otherwise indicated, information contained in this short form prospectus concerning our industry and the markets in which we operate or seek to operate, including our general expectations and market position, market opportunities and market share, is based on information from independent industry organizations and consultants, other third-party sources (including industry publications, surveys and forecasts), such as Grand View Research Inc. ("Grand View"), and management studies and estimates. The Grand View report described herein titled "Medical Robotic Systems Market Analysis by Product (Surgical, Orthopedic, Laparoscopy, Neurological, Rehabilitation, Assistive, Prosthetics, Orthotics, Steerable, Therapeutic, Exoskeleton, Non-Invasive, Hospital/Pharmacy, Telemedicine, I.V, Pharmacy, Emergency Response Robotic Systems) and Segment Forecasts to 2022" (the "Grand View Report") contains subjective research opinions and viewpoints of Grand View. The Grand View Report speaks as of its original publication date, August 2015 (and not as of the date of this prospectus) and the opinions and market data expressed in the Grand View Report are subject to change without notice.

The Company believes that these sources are generally reliable, but the accuracy and completeness of this information is not guaranteed. We have not independently verified this information.

While we believe the market position, market opportunity and market share information included in this short form prospectus is generally reliable, such information is inherently imprecise. In addition, projections, assumptions and estimates of our future performance and the future performance of the industry and markets in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described under the headings "Special Note Regarding Forward-Looking Statements" and "Risk Factors".

Trade-marks, Trade Names and Service Marks

This short form prospectus includes references to our trade-marks and trade names, such as SPORT Surgical System, Titan and Titan Medical, each of which may be protected under applicable intellectual property laws of one or more countries and which we believe is our property. Solely for convenience, our trade-marks referred to in this short form prospectus may appear without the TM symbol, but such references are not intended to indicate, in any way, our rights in such marks or that we will not assert, to the fullest extent under applicable law, our rights to these trade-marks and trade names. All other trade-marks and trade names referenced in this short form prospectus are the property of their respective owners.

DEFINITIONS AND OTHER MATTERS

In this short form prospectus unless otherwise indicated, references to "we", "us", "our", "Titan" or the "Company" are to Titan Medical Inc.

Documents are incorporated or deemed to be incorporated by reference into this short form prospectus. See "Documents Incorporated by Reference" in this short form prospectus.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This short form prospectus and the documents incorporated by reference in this short form prospectus contain “forward-looking information”, within the meaning of applicable Canadian securities laws, concerning anticipated developments and events which the Company has a reasonable basis to believe may occur in the future. These forward-looking statements are made as of the date of this short form prospectus or, in the case of documents incorporated by reference herein, as of the date of such documents. Forward-looking statements are frequently, but not always, identified by words such as “expects”, “expectation”, “anticipates”, “believes”, “intends”, “estimates”, “predicts”, “continues”, “potential”, “targeted”, “plans”, “possible” and similar expressions, or statements that events, conditions or results “will”, “may”, “could”, “would” or “should” occur or be achieved. Any forward-looking statements or statements of “belief”, including the statements made under “Risk Factors”, represent our estimates only as of the date of this short form prospectus and the documents incorporated by reference herein, respectively, and should not be relied upon as representing our estimates as of any subsequent date. These forward-looking statements may concern anticipated developments in the Company’s operations in future periods, the adequacy of the Company’s financial resources and other events or conditions that may occur in the future, and include, without limitation, statements regarding:

- the Company’s technology and research and development objectives, including development milestones, estimated costs, schedules for completion and probability of success;
- the Company’s intention with respect to updating any forward-looking statement after the date on which such statement is made or to reflect the occurrence of unanticipated events;
- the Company’s expectation with respect to continuing animal study feasibility and commencing cadaver studies;
- the Company’s expectation that pre-clinical animal data alone will be required, without the requirement for the initiation of human clinical studies for regulatory submissions;
- the Company’s expectation with respect to launching a commercial product in certain jurisdictions;
- the Company’s intentions to develop a robust training curriculum and post-training assessment tools;
- the Company’s plans to develop and commercialize the SPORT Surgical System and the estimated incremental costs (including the status, cost and timing of achieving the development milestones disclosed herein);
- the Company’s plans to design, create and refine software for production system functionality of the SPORT Surgical System and the estimated incremental costs (including the status, cost and timing of achieving the development milestones disclosed herein);
- the Company’s intentions to complete heuristic and formative usability modules and human factors studies, formalize user requirements, stabilize the design and development of the system and initiate pre-clinical studies;
- the Company’s intentions with respect to initiating marketing activities following receipt of the applicable regulatory approvals;
- the surgical indications for, and the benefits of, the SPORT Surgical System;
- the Company’s intention to continue to assess specialized skill and knowledge requirements and recruitment of qualified personnel and partners;
- the Company’s belief that the materials and parts necessary for the manufacture of a clinical-grade SPORT Surgical System will be available in the marketplace;
- the Company’s belief that its existing and planned prototype units will be able to support human factors studies and pre-clinical testing activities in 2017;
- the Company’s filing and prosecution of patent applications to expand its intellectual property portfolio as technologies are developed or refined;
- the Company’s seeking of licensing opportunities to expand its intellectual property portfolio;
- the Company’s intended use of proceeds of any offering of its shares;
- the Company’s intention with respect to not paying any cash dividends on Common Shares in the foreseeable future;
- the Company’s intention to retain future earnings, if any, to finance expansion and growth;
- projected competitive conditions with respect to the Company’s products;
- the estimated size of the market for robotic surgical systems; and

- the potential market for warrants or units.

Forward-looking statements are statements about the future and are inherently uncertain, and actual results of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, including those referred to in this prospectus, including but not limited to those described in the section titled, “Risk Factors”, in any applicable short form prospectus, in any document incorporated by reference herein, or listed from time to time in our reports, public disclosure documents and other filings with the securities commissions in Canada. These risks include, but are not limited to:

- Additional Financing
- History of Losses
- Going Concern
- Strategic Alliances
- Dependence on Key Personnel
- Ability to Attract Qualified Employees to Maintain and Grow Business
- Disclosure of Trade Secrets and Other Proprietary Information
- Dependence on Third Parties
- Competition
- Infringement of Intellectual Property Rights
- Intellectual Property
- Current Global Financial Conditions
- Trademarks
- Recent Changes in Senior Management of the Company
- Conflicts of Interest
- Results of Operations
- Rapidly Changing Markets Make it Difficult to Forecast Future Operating Results
- Uncertain Market/Uncertain Acceptance of the Company’s Technology/Target Market
- Technological Advancements
- Insurance and Uninsured Risks
- Ability to License Other Intellectual Property Rights
- Government Regulation
- Profitability
- Changes in Government Policy
- Changes in Accounting and Tax Rules
- Contingent Liabilities
- Uncertainty as to Product Development and Commercialization Milestones
- Product and Services Not Completely Developed
- Manufacturing Risks
- Reliance on External Suppliers and Development Firms
- Product Defect Risk
- Suppliers
- Stock Price Volatility
- Future Share Sales
- Limited Operating History
- Fluctuating Financial Results
- Effect of Estimates Regarding Milestones
- Currency Fluctuations

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

- general business and current global economic conditions;

- future success of current research and development activities;
- achieving development and commercial milestones;
- inability to achieve produce cost targets;
- competition;
- changes to tax rates and benefits;
- the availability of financing;
- the Company's and competitors' costs of production and operations;
- the Company's ability to attract and retain skilled employees;
- the Company's ongoing relations with its third-party service providers;
- the design of the SPORT Surgical System and related platforms and equipment;
- the progress and timing of the development of the SPORT Surgical System;
- costs related to the development, completion and potential commercialization of the SPORT Surgical System;
- receipt of all applicable regulatory approvals;
- estimates and projections regarding the robotic surgery equipment industry;
- protection of the Company's intellectual property rights;
- market acceptance of the Company's systems under development; and
- the type of specialized skill and knowledge required to develop the SPORT Surgical System and the Company's access to such specialized skill and knowledge.

We caution that the foregoing list of important factors and assumptions is not exhaustive. Although the Company has attempted to identify on a reasonable basis important factors and assumptions related to forward-looking statements, there can be no assurance that forward-looking statements will prove to be accurate, as events or circumstances or other factors could cause actual results to differ materially from those estimated or projected and expressed in, or implied by, these forward-looking statements. Other than as specifically required by law, the Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made, or to reflect the occurrence of unanticipated events, whether as a result of new information, future events or results or otherwise. Accordingly, readers should not place undue reliance on forward-looking statements.

CURRENCY PRESENTATION AND EXCHANGE RATE INFORMATION

All currency amounts in this short form prospectus are expressed in United States dollars ("US \$"), unless otherwise indicated. The following table sets out the noon exchange rate of US \$1.00 in terms of Canadian dollars ("CDN \$").

	<u>High (CDN)</u>	<u>Low (CDN)</u>	<u>Average (CDN)</u>
Six months ended			
December 31, 2016	\$1.3582	\$1.2775	\$1.3193
December 31, 2015	\$1.3990	\$1.2566	\$1.3220
Fiscal years ended			
December 31, 2016	\$1.4589	\$1.2544	\$1.3248
December 31, 2015	\$1.3990	\$1.1728	\$1.2787

On June 7, 2017, the daily exchange rate for US \$ in terms of CDN \$, as quoted by the Bank of Canada, was US \$1.00 = CDN \$1.3492.

Functional Currency

Prior to January 1, 2014, the functional currency for Titan Medical Inc. was the Canadian dollar. As the Company continues to move closer to commercialization of the SPORT Surgical System, more of its transactions with suppliers, partners and employees are in US \$. As the Company does not have operating revenue, the primary factor in determining functional currency relates to the currencies in which it incurs expenditures. Titan expects the level

of spending in US \$ to continue to increase in 2017 and beyond. As a result and in accordance with IAS 21, “The Effects of Changes in Foreign Exchange Rates”, Titan has adopted the US \$ as its functional currency, effective January 1, 2014.

DOCUMENTS INCORPORATED BY REFERENCE

Information has been incorporated by reference in this short form prospectus from documents filed with securities commissions or similar regulatory authorities in Canada. Copies of the documents incorporated by reference herein may be obtained on request without charge from the Chief Financial Officer of the Company at Suite 1000, 170 University Avenue, Toronto, Ontario, M5H 3B3, Telephone: (416) 548-7522. These documents are also available through the internet under the Company’s profile on the System for Electronic Document Analysis and Retrieval which can be accessed at www.sedar.com. The following documents, filed with the various securities commissions or similar authorities in each of the provinces of British Columbia, Alberta and Ontario, are specifically incorporated by reference into and form an integral part of this short form prospectus:

1. the annual information form of the Company dated March 31, 2017 for the financial year ended December 31, 2016 (the “AIF”);
2. the audited financial statements of the Company as at, and for the financial years ended December 31, 2016 and 2015, together with the notes thereto and the Independent Auditor’s Report thereon;
3. the management’s discussion and analysis of financial condition and results of operations for the financial year ended December 31, 2016 (“MD&A”);
4. the unaudited condensed interim financial statements of the Company as at, and for the three months ended March 31, 2017, consisting of the unaudited condensed interim balance sheet of the Company as at March 31, 2017 and the unaudited condensed interim statement of shareholders’ equity and deficit, net and comprehensive loss and cash flows for the three months ended March 31, 2017 and 2016, together with the notes thereto;
5. the management’s discussion and analysis of financial condition and results of operations for the three months ended March 31, 2017;
6. the management information circular dated May 18, 2017 relating to Titan’s annual meeting of shareholders to be held on June 15, 2017;
7. the material change report of the Company dated January 10, 2017 in respect of the appointment of David J. McNally as Chief Executive Officer of the Company to replace interim Chief Executive Officer John E. Barker;
8. the material change report of the Company dated January 10, 2017 in respect of the resignation of Dr. Reiza Rayman as President of the Company and David J. McNally assuming the role of President;
9. the material change report of the Company dated March 16, 2017 in respect of the announcement and terms of a previous public offering;
10. the material change report of the Company dated March 16, 2017 in respect of the filing of a short form prospectus and subsequent closing of a previous public offering;
11. the material change report of the Company dated June 2, 2017 in respect of the Company’s termination of its negotiations with Longtai; and
12. the “template version” (as such term is defined in National Instrument 41-101 – *General Prospectus Requirements*) of the management presentation of the Corporation dated and filed on SEDAR on June 8, 2017.

Material change reports (other than confidential reports), business acquisition reports, interim financial statements, annual financial statements, annual information forms and all other documents of the type required by National Instrument 44-101 – *Short Form Prospectus Distributions* to be incorporated by reference in a short form prospectus, filed by the Company with a securities commission or similar regulatory authority in Canada after the date of this short form prospectus and before completion or withdrawal of this Offering, will be deemed to be incorporated by reference into this short form prospectus.

Upon a new annual information form and annual financial statements being filed by the Company with the applicable Canadian securities commissions or similar regulatory authorities in Canada during the period that this short form prospectus is effective, the previous annual information form, the previous annual financial statements and all interim financial statements, and in each case the accompanying management's discussion and analysis of financial condition and results of operations, and material change reports, filed prior to the commencement of the financial year of the Company in which the new annual information form is filed shall be deemed to no longer be incorporated into the short form prospectus for purposes of offers and sales of Units under this short form prospectus. Upon interim financial statements and the accompanying management's discussion and analysis of financial condition and results of operations being filed by the Company with the applicable Canadian securities commissions or similar regulatory authorities during the period that this short form prospectus is effective, all interim financial statements and the accompanying management's discussion and analysis of financial condition and results of operations filed prior to such new interim financial statements and management's discussion and analysis of financial condition and results of operations shall be deemed to no longer be incorporated into this short form prospectus for purposes of offers and sales of Units under this short form prospectus. In addition, upon a new management information circular for an annual meeting of shareholders being filed by the Company with the applicable Canadian securities commissions or similar regulatory authorities during the period that this short form prospectus is effective, the previous management information circular filed in respect of the prior annual meeting of shareholders shall no longer be deemed to be incorporated into this short form prospectus for offers and sales of Units under this short form prospectus.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this short form prospectus shall be deemed to be modified or superseded for the purposes of this short form prospectus to the extent that a statement contained in this short form prospectus or in any subsequently filed document which also is or is deemed to be incorporated by reference in this short form prospectus modifies or supersedes that statement. The modifying or superseding statement need not state that it has modified or superseded a prior statement or include any other information set forth in the document or statement that it modifies or supersedes. The making of a modifying or superseding statement shall not be deemed an admission for any purpose that the modified or superseded statement, when made, constituted a misrepresentation, an untrue statement of a material fact or an omission to state a material fact that is required to be stated or that is necessary to make a statement not misleading in light of the circumstances in which it was made. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this short form prospectus.

MARKETING MATERIALS

Any "template version" of any "marketing materials" (as such terms are defined under applicable Canadian securities laws) that are used by the Agents in connection with the Offering are not part of this short form prospectus to the extent that the contents of the template version of the marketing materials have been modified or superseded by a statement contained in this short form prospectus. Any template version of any marketing materials that has been, or will be, filed on SEDAR before the termination of the distribution under the Offering (including any amendments to, or an amended version of, any template version of any marketing materials) is deemed to be incorporated by reference into this short form prospectus.

SUMMARY OF DESCRIPTION OF BUSINESS

Product Development

The Company's business is focused on research and development through to the planned commercialization of computer-assisted robotic surgical technologies for application in minimally invasive surgery ("MIS"). The Company is currently developing the SPORT Surgical System, a single-port robotic surgical system. The SPORT

Surgical System is comprised of a surgeon-controlled patient cart that includes a 3D high definition vision system and multi-articulating instruments for performing MIS procedures, and a surgeon workstation that provides the surgeon with an advanced ergonomic interface to the patient cart and a 3D endoscopic view inside the 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, gynecologic and urologic procedures.

Development of the SPORT Surgical System has proceeded in response to "voice of customer" feedback and, consultation with medical technology development firms and input from the Company's Surgeon Advisory Board (the "Surgeon Advisory Board") comprised of key opinion leaders in targeted fields. This approach has allowed the Company to design a robotic surgical system that is intended to include the traditional advantages of robotic surgery including 3D stereoscopic imaging and restoration of instinctive control, as well as new and enhanced features, including an advanced surgeon workstation incorporating a 3D high definition display providing a more ergonomically friendly user interface and a patient cart with improved instrument dexterity. Overall, the surgical system is designed to be adapted to the needs of the surgeon, rather than the surgeon having to adapt to the system.

The SPORT Surgical System patient cart is being developed to deliver interactive multi-articulating instruments and a 3D high definition vision system into a patient's abdominal body cavity through a single access port. The design of the patient cart includes an insertion tube of approximately 19 millimeter (mm) diameter, capable of insertion into the patient's body cavity through a skin incision of approximately 25 mm. The insertion tube includes a collapsible distal end portion incorporating a 3D high definition camera module that once inserted, is configured to deploy into a working configuration wherein the camera module and multi-articulating instruments can be controlled by a surgeon via the workstation. The reusable multi-articulating, snake-like instruments are designed to couple with sterile detachable single patient use robotic end effectors that would provide first use quality in every case and eliminate the reprocessing of the complete instrument. The use of reusable (re-usable for a specific number of uses) robotic instruments and single patient use end effectors is intended to minimize the cost per procedure. The patient cart 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 within the operating room, or redeployed within hospitals and surgical centers, where applicable.

As part of the development of the SPORT Surgical System, the Company plans to develop a robust training curriculum and post-training assessment tools for surgeons and surgical teams. The proposed training curriculum will likely include cognitive pre-training, psychomotor skills training, surgery simulations, live animal and human cadaver lab training, surgical team training, troubleshooting and an overview of safety. Post-training assessment will include validation of the effectiveness of those assessment tools.

The Company continuously evaluates its technologies under development for intellectual property protection. As of May 31, 2017, the Company has ownership or certain exclusive rights to 14 patents and 37 patent applications. The Company anticipates expanding its intellectual property portfolio by filing additional patent applications as it progresses in the development of robotic surgical technologies, acquiring and/or by licensing suitable technologies. The Company previously entered into exclusive license agreements with several organizations including the Trustees of Columbia University. The agreement with Columbia University provides the Company with certain rights for the development and commercialization of robotic surgical technology for use in single port surgery, providing a basis for the development of the SPORT Surgical System.

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 targeted dates for pre-clinical studies and completion of regulatory submissions. To assess progress, the Company regularly tests and evaluates its technology. If such evaluations indicate technical defects or failure to meet cost or performance goals, the Company's 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. See "Risk Factors".

Development Objectives

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

At this time, the Company's primary development objectives and milestones in 2017 will be to advance human factors studies, formalize user requirements, stabilize the design and development of the system, and initiate pre-clinical studies. Pre-clinical studies performed in live animal subjects by surgeons with fully-functional prototypes can provide valuable insights regarding system performance, as well as the suitability of related surgical accessories, during representative surgical procedures under controlled laboratory conditions.

Based on the evolution of the SPORT design, the creation and refinement of software for production system functionality has not yet been completed. As the system design matures, the Company anticipates that the refinement of software for production system functionality will continue as an intensive, ongoing process through the balance of 2017 with anticipated completion in 2018. As software development is a parallel effort, it is anticipated that insights gained from human factors and pre-clinical studies will provide opportunities to optimize the system for clinical use.

The Company estimates that it will require approximately \$15.6 million of additional capital to meet its development milestones for the second half of 2017, including pre-clinical studies performed with fully-functional prototypes in live animals. Management currently estimates that milestone achievement for the first half of 2018, including completion of software development and system design for regulatory filing, and verification of system operation with clinical experts, will further require \$15.5 million of additional capital.

Although an estimate of the timing and costs for the development milestones in the second half of 2018 and beyond remains highly speculative, the Company presently estimates that a total of US \$70 million of additional capital, will be required to fund development work through submission of the 510(k) application to The Food and Drug Administration of the United States Department of Health and Human Services (the "FDA") and submittal to European authorities for the CE Mark, which are projected by year-end 2018. However, given the uncertainty of, among other things, product development timelines, regulatory requirements, the timing and number of future animal and human cadaver studies that may be required and the availability of required capital to fund development and operating costs, the actual costs and development times may exceed management's current expectations.

In addition to being capital intensive, research and development activities relating to the Company's SPORT surgical robot, which is a highly complex medical device 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, 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. Please see "Risk Factors".

Current Development Plan

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

The Company anticipates development costs through to the second half of 2018 to be as set out in the table below.

<i>Development Milestones</i>	<i>Estimated Cost (in U.S. million \$)</i>	<i>Schedule for Milestone Completion</i>	<i>Comments</i>
Complete human factors and usability studies			
Finalize user requirements for 1 st generation robotic surgical system	4.5	Q1 2017	<i>Completed</i>
Select and confirm strategic facilities for pre-clinical studies in US and Europe	0.5	Q2 2017	<i>Facilities identified, In Contract Phase</i>
Test and evaluate performance of subsystems of existing EV units	1.8	Q2 2017	<i>Completed</i>

Development Milestones	Estimated Cost (in U.S. million \$)	Schedule for Milestone Completion	Comments
Complete initial formative human factors studies	1.0	Q2 2017	<i>Completed</i>
Initiate design changes based on subsystem performance and human factors evaluation	1.0	Q2 2017	<i>Initiated on Schedule, Design Changes in Process</i>
Complete and verify system design architecture, including performance testing in laboratory environment and design of surgeon simulation training modules - Implement design changes and retest system and subsystems - Update Design History File and documentation for relevant modules of Company Quality Management Systems ("QMS") - Complete initial requirements and architecture for surgeon simulation software and training program design, as required in preparation for FDA submittal	7.7 ⁽²⁾	Q3 2017	
Verify system performance in pre-clinical (live animal labs, swine), while establishing clear regulatory pathways for US and Europe - Complete and report on pre-clinical live animal (swine) studies at strategic facilities in US and Europe - Confirm FDA and CE Mark pathways in coordination with regulatory authorities	7.9 ⁽³⁾	Q4 2017	
Complete software development, system design and update Design History File for regulatory filing applications	8.0 ⁽⁴⁾	Q1 2018	
Verify production system operation with clinical experts under rigorous formal (summative) human factors evaluation under simulated robotic manipulation exercises, and exercise completed surgeon simulation software and training program	7.5 ⁽⁵⁾	Q2 2018	
Complete and document pre-clinical live animal (swine) surgery studies that are representative of anticipated human surgeries for FDA submittal	TBD ⁽¹⁾	Q3 2018	
Prepare and submit 510(k) application to FDA and prepare technical file for CE Mark and submit to European Notified Body - Publish white papers on pre-clinical	TBD ⁽¹⁾	Q4 2018	

Development Milestones	Estimated Cost (in U.S. million \$)	Schedule for Milestone Completion	Comments
studies containing evidence of system performance in live animal surgeries that are representative of anticipated human surgeries			
Anticipated receipt of FDA 510(k) clearance and CE Mark	TBD ⁽¹⁾	H1 2019	
Perform successful human surgeries at initial US and European training centers		H2 2019	
TOTAL	TBD ⁽¹⁾		

Notes:

- (1) A specific cost for individual milestone completion cannot be estimated at this time.
- (2) Includes research & development costs estimated at approximately US \$6.4 million, and general & administrative costs estimated at approximately US \$1.3 million.
- (3) Includes research & development costs estimated at approximately US \$6.7 million, and general & administrative costs estimated at approximately US \$1.2 million.
- (4) Includes research & development costs estimated at approximately US \$6.7 million, and general & administrative costs estimated at approximately US \$1.3 million.
- (5) Includes research & development costs estimated at approximately US \$6.3 million, and general & administrative costs estimated at approximately US \$1.2 million.

Upon completion of the development of the SPORT Surgical System and following receipt of all applicable regulatory approvals in the United States and Europe 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 development of its SPORT Surgical System progresses, or existing milestones, budgets and the schedule for completion of each milestone may change depending on a number of factors including the results of the Company's development program, the availability of financing and the ability of development firms engaged by the Company to complete work assigned to them. The total costs to complete the development 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 see "Caution Regarding Forward-Looking Statements" and "Risk Factors".

Market Opportunity

The Company's robotic surgical system is being designed to address the growing robotic surgery market. The size of the market for robotic surgical systems is estimated by Grand View to grow from approximately US \$7.5 billion in 2014 to US \$17.9 billion by 2022. See Grand View's report entitled "Medical Robotic Systems by Product (Surgical, Orthopedic, Laparoscopy, Neurological, Rehabilitation, Assistive, Prosthetics, Orthotics, Steerable, Therapeutic, Exoskeleton, Non-Invasive, Hospital/Pharmacy, Telemedicine, I.V, Pharmacy, Emergency Response Robotic Systems) – Analysis and Segment Forecasts to 2022" dated August, 2015, excerpts of which may be viewed at www.grandviewresearch.com. According to a press release issued by industry leader Intuitive Surgical on January 11, 2017, approximately 753,000 surgical procedures were performed with the da Vinci Surgical System in 2016, an increase of approximately 15% compared with approximately 652,000 procedures performed in 2015.

Robotic Surgery

Surgery has traditionally been performed through large, open incisions. Over the past 25 years, minimally invasive techniques and devices have been employed to minimize the size of incisions, reduce trauma to patients, and in turn, reduce associated pain, accelerate healing, shorten recovery times and produce smaller scars. Some of these benefits, such as shorter recovery times and reduced pain leading to shorter hospital stays, are directly associated with lower costs of care. However, minimally invasive surgery (“MIS”) requires special tools to operate through small ports in the body, and advanced training for surgeons to manipulate those tools while viewing a two-dimensional image of the patient’s internal anatomy on a monitor. As a result, consistent outcomes improvements are demonstrated by the most skilled and experienced surgeons, and less reliably by those less experienced. For these reasons, the acceptance of MIS has not broadly increased in more complex surgeries.

The shortcomings of both open surgery and MIS have led to the introduction of robots within the surgical environment. Robotic or computer-assisted surgical technologies represent the next generation in the evolution of advanced surgical care. The objectives of robotic systems are to provide surgeons with tools to allow complex procedures to be performed repeatedly with greater precision and dexterity, while offering improved vision and control. The use of robotics is intended to empower surgeons to employ improved techniques for minimally invasive surgery, and assist in reducing the risks associated with complex MIS surgeries.

Market Acceptance

To date, robotic surgical technologies have been employed in urology, gynecology, colon and rectal surgery, cardiothoracic surgery, general surgery, head and neck surgery, orthopedic surgery, neurosurgery, and catheter-based interventional cardiology and radiology.

The success of robotic technologies in these applications has led to the growing adoption and commercialization of these technologies in the medical industry. Although robotic surgical procedures have been gaining substantial acceptance, the industry is still in its infancy. The available technology is evolving along with advancements in imaging and computer-machine controls to overcome technical challenges. Current objectives include overcoming the limitations of multi-port access, limited dexterity and visualization.

Competitive Conditions

The industry leader within the robotic surgical market is Intuitive Surgical, Inc. (NASDAQ: ISRG), manufacturer of several models of the da Vinci® Surgical System. In addition, there are a number of companies reported to be currently using or planning to use robots or computers in surgery, including TransEnterix Inc. (Senhance™ Surgical Robotic System), Medtronic, Inc., Medrobotics Corporation (Flex® Robotic System), Verb Surgical Inc. (a collaboration between Alphabet Inc.’s Verily division (formerly, Google Life Sciences) and Ethicon, a division of Johnson & Johnson), and South Korea’s Meere Company Inc. (Eterne robotic system).

In 2016, Zimmer Biomet announced the purchase of France’s MedTech, the maker of the ROSA™ surgical robot for minimally invasive neurosurgical procedures which was sold and used for the first time, in 2016. In early 2016, TransEnterix announced that its SurgiBot System did not receive FDA clearance and that TransEnterix would instead focus its efforts on obtaining FDA approval for its Senhance™ Surgical Robotic System.

Any company with substantial experience in robotics or complex medical devices could potentially expand into the field of surgical robotics and become a future competitor.

Regulation

United States Regulatory Process

In the United States, the Company’s surgical system will be subject to regulation by the FDA. Management expects that under the FDA guidelines, the surgical system will be classified as a Class II medical device. Class II devices are those which are subject to the general controls and require premarket demonstration of adherence to certain

performance standards or other special controls, as specified by the FDA, and clearance by the FDA. Premarket review and clearance by the FDA for these devices is accomplished through the 510(k) premarket notification process. For most Class II devices, the manufacturer must submit to the FDA a premarket notification submission, demonstrating that the device is “substantially equivalent” in intended use and technology to a “predicate device” that is either:

- (1) a device that has grandfather marketing status because it was legally marketed prior to May 28, 1976, the date upon which the Medical Device Amendments of 1976 were enacted, or
- (2) a Class I or II device that has been cleared through the 510(k) process.

The FDA may require further information, including clinical data, to make a determination regarding substantial equivalence. If the FDA determines that the device, or its intended use, is not “substantially equivalent” (as such term is defined by the FDA), the FDA may place the device, or the particular use of the device, into Class III, and the device sponsor must then fulfill much more rigorous pre-marketing requirements.

After a device receives 510(k) clearance, any modification that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, would require a new 510(k) clearance or could require a pre-market approval application. The FDA requires each manufacturer to make this determination in the first instance, but the FDA can review any such decision. If the FDA disagrees with a manufacturer’s decision not to seek a new 510(k) clearance, the agency may retroactively require the manufacturer to seek 510(k) clearance or pre-market approval. The FDA may also require the manufacturer to cease marketing and/or recall the modified device until 510(k) clearance or pre-market approval is obtained.

European Union and Canada Regulatory Process

Medical devices in the European Union (“EU”) are regulated under EU Council Directive 93/42/EEC as amended by 2007/47/EC, also referred to as Medical Device Directive or MDD, and must bear the CE Mark prior to being placed on the market. In order to affix the CE Mark on products, a recognized European Notified Body must certify a manufacturer’s quality management system for compliance with international and European requirements. Any modifications of existing products or development of new products in the future will require permission to affix the CE Mark to such products.

In order to commercialize products in Canada, regulatory approval from Health Canada (Therapeutic Products Directorate, Medical Devices Bureau) is required. Medical device licence applications must contain a valid ISO 13485:2003 certificate issued by a Health Canada recognized registrar under the Canadian Medical Devices Conformity Assessment System (CMDCAS). Evaluation of product safety and effectiveness is completed by Health Canada.

Specialized Skill and Knowledge

The research and development of the Company’s surgical system requires specialized skill and knowledge. We believe the required skill and knowledge to carry out the current stage of research and development is available to the Company, through its current officers, employees and external medical technology development firms. The Company will continue to assess its requirements and recruit and engage required qualified personnel and development firms as needed, subject to budget limitations. If the final research and development stage is successfully completed and the clinical-grade SPORT Surgical System is developed, it is believed that the materials and parts necessary for the manufacture of the product will be available in the marketplace. However, there is no assurance in this regard as the research and development program may, in the future, reveal requirements for new materials and parts that have not been identified to date.

Intellectual Property Protection

The Company continuously evaluates its technologies under development for intellectual property protection. In accordance with industry practice, the Company's proprietary rights are currently protected through a combination of copyright, trade-mark, patents, trade secret laws and contractual provisions.

Patent applications are filed in various jurisdictions internationally, which are selectively chosen having regard to the likely value and enforceability of intellectual property rights in those jurisdictions, and to strategically reflect the Company's anticipated principal markets. Patents provide the Company with a potential right to exclude others from incorporating the Company's technical innovations into their own products and processes. Where appropriate, the Company licenses third party technologies to provide the Company with the flexibility to adopt preferred technologies.

As of May 31, 2017, the Company had ownership of certain exclusive rights to 14 patents and 37 patent applications. The Company anticipates expanding its intellectual property portfolio by filing additional patent applications as it progresses in the development of robotic surgical technologies, acquiring and/or by licensing suitable technologies.

The scope of protection obtained, if any, from the Company's current or future patent applications may not be known for several years. Moreover, there is no assurance that any patents will be issued with respect to any such patent applications, and if patents are issued, they may not provide the Company with the expected competitive advantages, or they may not be issued in a manner that gives the Company the protection that it seeks, or they may be successfully challenged by third parties.

The Company also seeks to avoid disclosure of its intellectual property and proprietary information by requiring employees and consultants to execute non-disclosure and assignment of intellectual property agreements. Such agreements also require the Company's employees and consultants to assign to the Company all intellectual property developed in the course of their employment or engagement. The Company also utilizes non-disclosure agreements to govern interaction with business partners and prospective business partners and other relationships where disclosure of proprietary information may be necessary, and the Company takes measures to carefully protect its intellectual property rights in its supplier agreements with external development firms.

While the Company believes that its technology being developed or utilized does not infringe upon the proprietary rights of third parties, its commercial success depends, in part, upon the Company not infringing intellectual property rights of others. A number of medical device and robotic surgery companies and other third parties have been issued patents or may have filed patent applications or may obtain additional patents and proprietary rights for technologies similar to those being developed or utilized by the Company. Accordingly, there may exist third party patents, patent applications or other proprietary rights that require the Company to alter its technology, obtain licenses or cease certain activities. The Company may become subject to claims by third parties that its technology infringes their intellectual property rights due to the growth of products in its target markets, the overlap in functionality of those products and the prevalence of products. The Company may become subject to these claims either directly or through indemnities against these claims that it may provide to end users, manufacturer's representatives, distributors, value added resellers, system integrators and original equipment manufacturers.

Although the Company has certain applications for trade-mark registrations pending, it may be unable to obtain or maintain trademark registrations for the marks and names it uses in one or more countries. It is also possible that the use of "SPORT", "SPORT Surgical System", "Titan", "Titan Medical" or variations thereof may infringe or contravene the rights, including trademark rights, of other parties in one or more countries. In the event of actual or alleged infringement or contravention of rights, the Company may be forced to cease using these marks and names.

Operations

The Company develops its core technologies through a combination of in-house personnel and selected external engineering and medical technology development and manufacturing firms. Certain components of the Company's robotic surgical system are being developed to the Company's specifications by various third party suppliers,

medical technology development and manufacturing firms through purchase orders and it does not have long-term contracts with any third parties.

The Company maintains its head office at subleased premises in Toronto, Ontario.

Employees

As of May 31, 2017, the Company had a total of nine full-time employees and one consultant.

RECENT DEVELOPMENTS

Financing

In March 2017, the Company completed an offering of 21,467,200 units. Each unit comprised one common share and (i) one-half of one common share purchase warrant at a price of \$0.40 for a period of two years following closing, and (ii) one-half of one common share purchase warrant at a price of \$0.50 for a period of four years following closing. The gross proceeds of the offering were CDN\$7,513,520.

Evolution of Costs and Timelines

As noted in the Company's previous public filings, in 2016, the Company's financial resources were reduced to the point that it scaled back product design and development of the SPORT Robotic Surgical System by its third party development and manufacturing partners while the Company undertook to raise incremental capital to enable it to advance at a limited pace in response to its capital resources. The Company continues efforts to secure sufficient financing to proceed with full scale product development. The ability of the Company to achieve its 2019 commercialization goals is contingent upon raising additional capital, as described in this Short Form Prospectus.

New FDA guidance was issued in 2016 that recommended additional/increased Human Factors Evaluation requirements for medical device companies. This has caused, and will continue to cause the Company to incur substantial expenses related to heuristic, formative and summative human factors evaluations in preparation for FDA 510(k) clearance submittal in 2018.

The rapidly evolving competitive market in surgical robotics requires a higher-performance product than originally envisioned by the Company at its inception. This has required the re-assessment of user requirements in consideration of competitors and in turn, driven further design changes. Specifically, the market leader, Intuitive Surgical, has since revealed and begun clinical evaluation of its da Vinci SP Surgical System, a single port robotic surgical system, in select hospital sites. In addition, competitor Medrobotics has announced the expansion of applications for its Flex Robotic System beyond ENT surgery, and into abdominal surgery. Resulting design changes to the Company's product include instrument control mechanisms and software, as well as the visualization system, including 3D camera and optics, and light source.

The Company has experienced technical challenges associated with design engineering of a product that would be less likely to infringe on the patented technology of others, in a field in which patent infringement claims and litigation prosecution have been prolific. There are now over 1,000 issued patents associated with surgical robots. Resulting design changes involve hardware, electrical control systems, and software. Further, an exhaustive review of the entire existing field of patents, as well as ongoing review of all newly issued intellectual property is critical to the viability of the Company, as infringement of the intellectual property of others could require the Company to incur licensing or royalty expenses, or worse yet, force the Company to redesign, or scrap altogether, its robotic surgical system. The Company continues to study the evolving competitive surgical products patent landscape, in order to ensure that its product would not likely infringe the intellectual property of others. Proactively, the Company also seeks to establish a pathway for meaningful patentability of the company's technology. Protection of the Company's novel technology is critical for preserving the value of its products, and can significantly reduce the ability of competitors to copy its ideas. The Company has accelerated its prosecution of patents that it believes will validate the novelty of the Company's unique technology, and in turn, will support the value of the entire franchise, on behalf of its stockholders. Early evidence of success with this initiative is the issuance of U.S. Patent No.

9,629,688 titled “Actuator and Drive for Manipulating a Tool”, on April 25, 2017, and European Patent No. EP2996613, titled “Articulated Tool Positioner and System Employing Same”, on June 7, 2017.

Management Changes

Effective January 1, 2017, David McNally was appointed as Chief Executive Officer and as a director of the Company. On January 9, 2017, Dr. Reiza Rayman resigned as President of the Company and on February 10, 2017, he resigned as a director of the Company. On January 9, 2017, David McNally was also appointed as President of the Company. On January 26, 2017, Christopher Seibert (previously, the Company’s Vice President of corporate accounts) was appointed as Vice President of Business Development, with responsibility for developing strategic supplier relationships, partner sites for pre-clinical studies, and key surgeon advisor relationships. Effective February 6, 2017, the Company appointed Perry Genova, Ph.D., as Vice President, Research and Development of the Company. Effective April 3, 2017, the Company appointed Curtis Jensen as Vice President of Quality and Regulatory Affairs.

For additional recent developments, please see “Description of Business – Development Objectives - *Recent Developments*”.

PRICE RANGE OF LISTED SECURITIES

The Common Shares are listed for trading in Canada on the TSX under the symbol “TMD”. The Common Shares are also traded on the OTCQB market in the United States under the symbol “TITXF”. The Company also has nine classes of warrants which were, over the last 12 months, listed on the TSX under the symbols TMD.WT.A, TMD.WT.B, TMD.WT.C, TMD.WT.D, TMD.WT.E, TMD.WT.F., TMD.WT.G., TMD.WT.H and TMD.WT.I.

Summary of Monthly Trading – Common Shares

The following table shows the high and low trading prices and the volume of Common Shares traded on the TSX for each of the last 12 months (as reported by the TSX).

Month	High (CDN \$)	Low (CDN \$)	Volume
<u>2016</u>			
June	0.88	0.75	2,041,214
July	0.90	0.78	1,425,302
August	0.89	0.49	4,360,204
September	0.71	0.345	9,345,223
October	0.55	0.355	8,390,162
November	0.53	0.385	2,787,345
December	0.45	0.31	3,506,265
<u>2017</u>			
January	0.72	0.33	11,567,339
February	0.52	0.46	2,568,262
March	0.485	0.335	12,990,166
April	0.495	0.33	5,256,324
May	0.455	0.335	4,089,162
June 1-7	0.365	0.335	485,816

Summary of Monthly Trading – June 2016 Warrants

On June 21, 2011, the Company issued 5,577,500 warrants, which expired June 21, 2016, each exercisable for one Common Share at an exercise price of CDN \$2.00 (the “June 2016 Warrants”). The June 2016 Warrants were, until

their expiry, listed for trading on the TSX under the symbol “TMD.WT.A”. The following table shows the high and low trading prices and the volume of June 2016 Warrants traded on the TSX for each of the last 12 months (as reported by the TSX), up to June 21, 2016 when the June 2016 Warrants expired.

Month	High (CDN \$)	Low (CDN \$)	Volume
<u>2016</u>			
June 1-21	0.005	0.005	1,064,635

Summary of Monthly Trading – December 2016 Warrants

On December 22, 2011 the Company issued 4,880,000 warrants, which expired December 22, 2016, each exercisable for one Common Share at an exercise price of CDN \$1.75 (the “December 2016 Warrants”). The December 2016 Warrants were, until their expiry, listed for trading on the TSX under the symbol “TMD.WT.B”. The following table shows the high and low trading prices and the volume of December 2016 Warrants traded on the TSX for each of the last 12 months (as reported by the TSX), up to December 22, 2016, when the December 2016 Warrants expired.

Month	High (CDN \$)	Low (CDN \$)	Volume
<u>2016</u>			
June	0.03	0.025	2,000
July	0.02	0.015	74,295
August	0.005	0.005	30,000
September	-	-	-
October	-	-	-
November	-	-	-
December 1 - 21	0.005	0.005	10,000

Summary of Monthly Trading – March 2018 Warrants

On March 13, 2013 the Company issued 6,260,763 warrants expiring March 13, 2018, each exercisable for one Common Share at an exercise price of CDN \$1.25 (the “March 2018 Warrants”). The March 2018 Warrants are listed for trading on the TSX under the symbol “TMD.WT.C”. The following table shows the high and low trading prices and the volume of March 2018 Warrants traded on the TSX for each of the last 12 months (as reported by the TSX).

Month	High (CDN \$)	Low (CDN \$)	Volume
<u>2016</u>			
June	-	-	-
July	-	-	-
August	-	-	-
September	0.095	0.095	1,350
October	0.095	0.095	300
November	0.015	0.015	1,000
December	0.04	0.015	63,000

Month	High (CDN \$)	Low (CDN \$)	Volume
<u>2017</u>			
January	0.06	0.05	21,500
February	-	-	-
March	0.06	0.01	44,000
April	0.06	0.035	21,000
May	0.07	0.045	11,500
June 1-7	-	-	-

Summary of Monthly Trading – February 2017 Warrants

On February 19, 2014 the Company issued 9,142,500 warrants expiring February 19, 2017, each exercisable for one Common Share at an exercise price of CDN \$2.00 (the “February 2017 Warrants”). The February 2017 Warrants were, until their expiry, listed for trading on the TSX under the symbol “TMD.WT.D”. The following table shows the high and low trading prices and the volume of February 2017 Warrants traded on the TSX for each of the last 12 months (as reported by the TSX), up to February 19, 2017, when the February 2017 Warrants expired.

Month	High (CDN \$)	Low (CDN \$)	Volume
<u>2016</u>			
June	0.03	0.03	1,000
July	N/A	N/A	500
August	0.01	0.005	148,000
September	0.015	0.005	23,000
October	-	-	-
November	0.010	0.005	242,700
December	0.005	0.005	100,000
<u>2017</u>			
January	0.005	0.005	5,000
February 1-19	-	-	-

Summary of Monthly Trading – April 2017 Warrants

On April 23, 2014, the Company issued 12,203,189 warrants expiring April 23, 2017, each exercisable for one Common Share at an exercise price of \$2.75 (the “April 2017 Warrants”). The April 2017 Warrants were, until their expiry, listed for trading on the TSX under the symbol “TMD.WT.E”. The following table shows the high and low trading prices and the volume of the April 2017 Warrants traded on the TSX for each of the last 12 months (as reported by the TSX) up to April 23, 2017, when the April 2017 Warrants expired.

Month	High (CDN \$)	Low (CDN \$)	Volume
<u>2016</u>			
June	0.015	0.015	4,000
July	-	-	-
August	0.005	0.005	101,000
September	0.005	0.005	5,000

Month	High (CDN \$)	Low (CDN \$)	Volume
October	-	-	-
November	-	-	-
December	-	-	-
<u>2017</u>			
January	-	-	-
February	-	-	-
March	-	-	-
April	-	-	-

Summary of Monthly Trading – November 2020 Warrants

On November 16, 2015, the Company issued 7,012,195 warrants expiring November 16, 2020, each exercisable for one Common Share at an exercise price of \$1.60 (the “November 2020 Warrants”). The November 2020 Warrants are listed for trading on the TSX under the symbol “TMD.WT.F”. The following table shows the high and low trading prices and the volume of the November 2020 Warrants traded on the TSX for each month since the date of their issuance (as reported by the TSX).

Month	High (CDN \$)	Low (CDN \$)	Volume
<u>2016</u>			
June	0.11	0.085	26,500
July	0.11	0.08	41,500
August	0.075	0.05	206,850
September	0.065	0.045	125,000
October	0.07	0.05	4,075
November	0.045	0.045	11,000
December	0.045	0.045	500
<u>2017</u>			
January	0.06	0.015	3,575
February	0.035	0.035	12,000
March	0.035	0.035	4,000
April	0.025	0.025	5,000
May	0.025	0.015	48,750
June 1-7	-	-	-

Summary of Monthly Trading – February 2021 Warrants

Titan issued 11,670,818 warrants on February 12, 2016 and issued 1,746,789 warrants on February 23, 2016, each exercisable for one Common Share at an exercise price of \$1.00 until February 12, 2021 and February 23, 2021 respectively (the “February 2021 Warrants”). The February 2021 Warrants are listed for trading on the TSX under the symbol “TMD.WT.G”. The following table shows the high and low trading prices and the volume of the February 2021 Warrants traded on the TSX for each month since the date of their issuance (as reported by the TSX).

Month	High (CDN \$)	Low (CDN \$)	Volume
<u>2016</u>			
June	0.24	0.19	547,360
July	0.23	0.18	304,575
August	0.20	0.11	579,391
September	0.13	0.055	432,700
October	0.08	0.055	55,000
November	0.06	0.05	16,500
December	0.05	0.05	17,000
<u>2017</u>			
January	0.095	0.06	264,700
February	0.12	0.115	20,000
March	0.07	0.05	197,211
April	0.055	0.05	36,611
May	0.05	0.03	119,556
June 1-7	-	-	-

Summary of Monthly Trading – March 2021 Warrants

Titan issued 15,054,940 warrants on March 31, 2016 and 2,258,241 warrants on April 14, 2016, each exercisable for one Common Share at an exercise price of \$1.20 per warrant until March 31, 2021 and April 14, 2016 respectively (the “March 2021 Warrants”). The March 2021 Warrants are listed for trading on the TSX under the symbol “TMD.WT.H”. The following table shows the high and low trading prices and the volume of the March 2021 Warrants traded on the TSX for each month since the date of their issuance (as reported by the TSX).

Month	High (CDN \$)	Low (CDN \$)	Volume
<u>2016</u>			
June	0.16	0.13	737,081
July	0.16	0.135	86,200
August	0.15	0.06	327,100
September	0.07	0.05	124,366
October	0.08	0.04	89,100
November	0.05	0.03	126,000
December	0.06	0.04	21,500
<u>2017</u>			
January	0.08	0.05	133,000
February	0.075	0.05	43,900
March	0.05	0.03	79,000
April	0.05	0.04	86,500
May	0.045	0.03	106,000
June 1-7	-	-	-

Summary of Monthly Trading – September 2021 Warrants

Titan issued 17,083,333 warrants on September 20, 2016 and 2,030,000 warrants on October 27, 2016, each exercisable for one Common Share at an exercise price of CDN\$0.75 per warrant until September 20, 2021 and October 27, 2021 respectively (the “September 2021 Warrants”). The September 2021 Warrants are listed for trading on the TSX under the symbol “TMD.WT.I”. The following table shows the high and low trading prices and the volume of the September 2021 Warrants traded on the TSX for each month since the date of their issuance (as reported by the TSX).

Month	High (CDN \$)	Low (CDN \$)	Volume
<u>2016</u>			
September 20 - 30	0.10	0.07	1,154,800
October	0.09	0.07	1,101,000
November	0.08	0.05	1,786,817
December	0.08	0.05	926,500
<u>2017</u>			
January	0.15	0.07	1,528,500
February	0.12	0.10	348,000
March	0.10	0.06	338,500
April	0.13	0.095	157,500
May	0.085	0.05	397,900
June 1-7	-	-	-

PRIOR SALES

The following tables summarize the Common Shares or securities convertible into, or exercisable to acquire, Common Shares that have been issued by the Company during the 12 months prior to the date of this short form prospectus.

Common Shares issued:

<u>Date</u>	<u>Price Per Common Share (CDN \$)</u>	<u>Number of Common Shares Issued</u>
September 20, 2016	\$0.51	17,083,333 ⁽¹⁾
October 27, 2016	\$0.52	2,030,000 ⁽¹⁾
March 16, 2017	\$0.35	21,467,200 ⁽²⁾
May 3, 2017	\$0.40	110,000 ⁽²⁾
May 3, 2017	\$0.40	150,000 ⁽²⁾
May 11, 2017	\$0.40	97,535 ⁽²⁾
May 12, 2017	\$0.40	4,500 ⁽²⁾
May 15, 2017	\$0.40	5,500 ⁽²⁾

Notes:

- (1) Issued pursuant to a prospectus supplement of the Company dated September 13, 2016.
(2) Issued pursuant to a prospectus supplement of the Company dated March 10, 2017.

Warrants issued:

<u>Date</u>	<u>Exercise Price (CDN \$)</u>	<u>Number of Warrants Issued</u>
September 20, 2016	\$0.75	17,083,333 ⁽¹⁾

<u>Date</u>	<u>Exercise Price (CDN \$)</u>	<u>Number of Warrants Issued</u>
October 27, 2016	\$0.75	2,030,000 ⁽¹⁾
March 16, 2017	\$0.40	10,733,600 ⁽²⁾
March 16, 2017	\$0.50	10,733,600 ⁽²⁾

Notes:

(1) Issued pursuant to a prospectus supplement of the Company dated September 13, 2016.

(2) Issued pursuant to a prospectus supplement of the Company dated March 10, 2017.

Stock options issued:

<u>Date</u>	<u>Exercise Price (CDN \$)</u>	<u>Number of Stock Options Granted</u>
August 24, 2016	\$1.00	4,015,824
January 17, 2017	\$0.57	8,325,572
February 7, 2017	\$0.50	500,000
April 17, 2017	\$0.43	1,500,000

DESCRIPTION OF OFFERED SECURITIES

The Offering consists of a minimum of [●] Units and a maximum of [●] Units, each Unit consisting of (i) one Offered Share; (ii) one-half of one 2019 Warrant, each whole 2019 Warrant entitling the holder thereof to purchase one 2019 Warrant Share at an exercise price of US \$[●] per 2019 Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the date that is [●] months after the closing of the Offering; and (iii) one-half of one 2021 Warrant, each whole 2021 Warrant entitling the holder thereof to purchase one 2021 Warrant Share at an exercise price of US \$[●] per 2021 Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the date that is [●] months after the closing of the Offering. The Units will immediately separate into Offered Shares, 2019 Warrants and 2021 Warrants upon issuance.

Offered Shares

The authorized capital of the Company consists of an unlimited number of Common Shares. As at June 7, 2017, there were 188,346,181 Common Shares issued and outstanding. Assuming completion of the Minimum Offering, there will be an aggregate of [●] Common Shares issued and outstanding and assuming completion of the Maximum Offering, there will be an aggregate of [●] Common Shares issued and outstanding.

The holders of Common Shares are entitled to receive notice of and to attend all annual and special meetings of the Company's shareholders and to one vote in respect of each Common Share held at the record date for each such meeting. The holders of Common Shares are entitled, at the discretion of the Board of Directors, to receive out of any or all of the Company's profits or surplus properly available for the payment of dividends, any dividend declared by the Board of Directors and payable by the Company on the Common Shares. The holders of the Common Shares will participate *pro rata* in any distribution of the assets of the Company upon liquidation, dissolution or winding-up or other distribution of the assets of the Company. Such participation will be subject to the rights, privileges, restrictions and conditions attached to any of the Company's securities issued and outstanding at such time ranking in priority to the Common Shares upon the liquidation, dissolution or winding-up of the Company. Common Shares are issued only as fully paid and are non-assessable. Common Shares will only be issued through the book-based system administered by CDS, except in limited circumstances. See "Description of Offered Securities - Book-Based System".

Warrants

The 2019 Warrants and 2021 Warrants will each be governed by the terms of a warrant indenture (together, the "Warrant Indentures") to be entered into in each case between the Company and Computershare Trust Company of Canada, as warrant agent thereunder (the "Warrant Agent"). The Company will appoint the principal transfer offices of the Warrant Agent in Toronto, Ontario as the location at which Warrants may be surrendered for exercise or transfer. The following summary of certain provisions of the Warrant Indentures contains all of the material

attributes and characteristics of the Warrants but does not purport to be complete and is qualified in its entirety by reference to the provisions of the Warrant Indentures.

Each whole 2019 Warrant will entitle the holder to purchase one 2019 Warrant Share at an exercise price of US \$[●] per 2019 Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the date that is 24 months after the closing of the Offering (the “2019 Warrant Expiry Time”), and each whole 2021 Warrant will entitle the holder to purchase one 2021 Warrant Share at an exercise price of US \$[●] per 2021 Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the date that is 24 months after the closing of the Offering (together with the 2019 Warrant Expiry Time, the “Warrant Expiry Time”). **WARRANTS NOT EXERCISED PRIOR TO THE WARRANT EXPIRY TIME WILL BE VOID AND OF NO VALUE.**

The exercise price for the Warrants will be payable in Canadian dollars.

The Warrant Indentures will provide for adjustment in the number of Warrant Shares issuable upon the exercise of the Warrants and/or the exercise price per Warrant Share upon the occurrence of certain events, including:

- (i) the issuance of Common Shares or securities exchangeable for or convertible into Common Shares to holders of all or substantially all of the Company’s Common Shares by way of stock dividend or other distribution (other than a “dividend paid in the ordinary course”, as defined in the Warrant Indentures, or a distribution of Common Shares upon the exercise of the Warrants or pursuant to the exercise of director, officer or employee stock options granted under the Company’s stock option plan);
- (ii) the subdivision, redivision or change of the Common Shares into a greater number of shares;
- (iii) the reduction, combination or consolidation of the Common Shares into a lesser number of shares;
- (iv) the fixing of a record date for the issue of rights, options or warrants to all or substantially all of the holders of the Common Shares under which such holders are entitled, during a period expiring not more than 45 days after the record date for such issuance, to subscribe for or purchase Common Shares, or securities exchangeable for or convertible into Common Shares, at a price per share to the holder (or having an exchange or conversion price per share) of less than 95% of the “current market price”, as defined in the Warrant Indentures, for the Common Shares on such record date; and
- (v) the issuance or distribution to all or substantially all of the holders of the securities of the Company including shares, rights, options or warrants to acquire shares of any class or securities exchangeable or convertible into any such shares or cash, property or assets and including evidences of indebtedness, or any cash, property or other assets.

The Warrant Indentures will also provide for adjustment in the class and/or number of securities issuable upon the exercise of the Warrants and/or exercise price per security in the event of the following additional events:

(i) reclassifications of the Common Shares; (ii) consolidations, amalgamations, plans of arrangement or mergers of the Company with or into another entity (other than consolidations, amalgamations, plans of arrangement or mergers which do not result in any reclassification of the Common Shares or a change or exchange of the Common Shares into other shares); or (iii) the transfer of the undertaking or assets of the Company as an entirety or substantially as an entirety to another Company or other entity.

No adjustment in the exercise price or the number of Warrant Shares purchasable upon the exercise of the Warrants will be required to be made unless the cumulative effect of such adjustment or adjustments would change the exercise price by at least 1% or the number of Warrant Shares purchasable upon exercise by at least one one-hundredth of a Warrant Share. Further, no adjustment will be made for Common Shares issued: (i) upon exercise of the Warrants; (ii) pursuant to any dividend reinvestment or similar plan adopted by the Company; (iii) pursuant to stock option or purchase plans, as payment of interest on outstanding notes, in connection with strategic license agreements or other partnering arrangements; or (iv) in connection with a strategic merger, consolidation or purchase of substantially all of the securities or assets of a corporation or other entity.

The Company will also covenant in the Warrant Indentures that, during the period in which the Warrants are exercisable, it will give notice to holders of Warrants of certain stated events, including events that would result in an adjustment to the exercise price for the Warrants or the number of Warrant Shares issuable upon exercise of the Warrants, at least 10 days prior to the record date or effective date, as the case may be, of such event.

If a Warrant holder is entitled to a fraction of a Warrant, the number of Warrants issued to that Warrant holder shall be rounded down to the nearest whole Warrant. No fractional Warrant Shares will be issuable upon the exercise of any Warrants; instead cash will be paid in lieu of fractional shares. Holders of Warrants will not have any voting rights or any other rights which a holder of Common Shares would have.

The Warrants will not be exercisable in the United States or by or on behalf of a U.S. Person, nor will certificates representing the Common Shares issuable upon exercise of the Warrants be registered or delivered to an address in the United States, unless an exemption from registration under the U.S. Securities Act and any applicable state securities laws is available and the Company has received an opinion of counsel of recognized standing to such effect in form and substance reasonably satisfactory to the Company.

From time to time, the Company (when properly authorized) and the Warrant Agent, subject to the provisions of the Warrant Indentures, may amend or supplement the Warrant Indentures for certain purposes. Certain amendments or supplements to the Warrant Indentures may only be made by “extraordinary resolution”, which is defined in the Warrant Indentures as a resolution either: (i) passed at a meeting of the holders of Warrants at which there are holders of Warrants present in person or represented by proxy representing at least 25% of the aggregate number of the then outstanding Warrants and passed by the affirmative vote of holders of Warrants representing not less than 66⅔% of the aggregate number of all the then outstanding Warrants represented at the meeting and voted on such resolution; or (ii) adopted by an instrument in writing signed by the holders of Warrants representing not less than 66⅔% of the aggregate number of all of the then outstanding Warrants.

The Company has not applied and does not intend to apply to list the Warrants on any securities exchange. There will be no market through which the Warrants may be sold and purchasers may not be able to resell the Warrants purchased in the Offering. This may affect the pricing of the Warrants in the secondary market, the transparency and availability of trading prices, the liquidity of the Warrants, and the extent of issuer regulation.

Book-Based System

Registration of interests in, and transfers of, the Offered Shares and Warrants will be made only through the book-based system of CDS. On the date of closing of the Offering, the Company will deliver to CDS certificates evidencing the aggregate number of Offered Shares and Warrants subscribed for under the Offering. Offered Shares and Warrants must be purchased and transferred only through a CDS Participant. All rights of an owner of Offered Shares must be exercised through, and all payments or other property to which such owner is entitled will be made or delivered by, CDS or the CDS Participant through which the owner holds such Offered Shares or Warrants. Upon purchase of any Offered Shares or Warrants, the owner will receive only the customary confirmation. References in this short form prospectus to a holder of Offered Shares or Warrants means, unless the context otherwise requires, the owner of the beneficial interest in such Offered Shares or Warrants. Physical certificates evidencing Offered Shares and Warrants will not be issued except in limited circumstance and unless a request for a certificate is made to the Company. Physical certificates evidencing the Offered Shares and Warrants will be distributed to purchasers in the United States and in limited circumstances.

The Company and the Canadian Agent will not have any liability for: (i) records maintained by CDS relating to the beneficial interests in the Offered Shares, Warrants or the book-based accounts maintained by CDS; (ii) maintaining, supervising or reviewing any records relating to such beneficial ownership interests; or (iii) any advice or representation made or given by CDS and made or given with respect to the rules and regulations of CDS or any action taken by CDS or at the direction of the CDS Participants.

The ability of a beneficial owner of Offered Shares or Warrants to pledge such Offered Shares or Warrants or otherwise take action with respect to such owner’s interest in such Offered Shares or Warrants (other than through a CDS Participant) may be limited due to the lack of a physical certificate to the extent that such owner has not

requested a physical certificate from the Company. The Company has the option to terminate registration of the Offered Shares and Warrants through the book-based system in which case certificates for Offered Shares or Warrants in fully registered form will be issued to beneficial owners of such Offered Shares or Warrants or to their nominees.

CAPITALIZATION

The following summarizes the changes in the Company's capitalization as at March 31, 2017, the last day of the Company's most recently completed fiscal period in respect of which financial statements have been filed, with and without giving effect to the Offering.

Description of Capital	Outstanding as at March 31, 2017 (US \$)⁽³⁾	Outstanding as at March 31, 2017 after giving effect to the Minimum Offering (US \$)⁽¹⁾⁽³⁾	Outstanding as at March 31, 2017 after giving effect to the Maximum Offering (US \$)⁽¹⁾⁽³⁾
Share Capital	\$116,726,136 (187,978,646 shares)	\$[●] ([●] shares ⁽²⁾)	\$[●] ([●] shares ⁽²⁾)
Warrants	\$4,841,334 (95,861,135 Warrants ⁽⁴⁾)	\$[●] ([●] Warrants ⁽⁴⁾)	\$[●] ([●] Warrants ⁽⁴⁾)
Contributed Surplus	\$3,950,835	\$[●]	\$[●]
Common Shares Underlying Stock Options	16,225,260 shares	[●] shares	[●] shares

Notes:

- (1) Does not include the exercise of any options, warrants and broker warrants since March 31, 2017. For details of the share issuances in connection with such exercises, please see "Prior Sales" in this short form prospectus.
- (2) Assumes no exercise of the Broker Warrants to be issued in connection with the Offering. Upon the exercise of all of the Broker Warrants issuable under the Minimum Offering into Broker Warrant Shares (assuming no President's List Subscriber participates in the Offering), there would be issued and outstanding [●] Common Shares. Upon the exercise of all of the Broker Warrants issuable under the Maximum Offering into Broker Warrant Shares (assuming no President's List Subscriber participates in the Offering), there would be issued and outstanding [●] Common Shares.
- (3) Figures are based on the daily exchange rate as quoted by the Bank of Canada on June 7, 2017 of US \$1.00 = CDN \$1.3492.
- (4) Excludes broker warrants issued in connection with offerings by the Company. The Company has issued and outstanding 4,915,113 broker warrants prior to this Offering. The Company will have [●] broker warrants issued and outstanding in the event of the Minimum Offering and [●] broker warrants issued and outstanding in the event of the Maximum Offering, assuming no President's List Subscriber participates in the Offering.

USE OF PROCEEDS

Proceeds and Funds Available

The Company intends to use the net proceeds from the Offering to continue development of the SPORT Surgical System throughout the third quarter of 2017. The net proceeds of the Minimum Offering will be used to complete and verify system design architecture, including performance testing in a laboratory environment and design of surgeon simulation training materials (the "Minimum Offering Objectives"). If the Maximum Offering is completed, the net proceeds will be used to complete the Minimum Offering Objectives and to fund the verification of system performance in pre-clinical studies (live swine), while establishing regulatory pathways for the U.S. and Europe.

The Company will invest the net proceeds of the Offering in short-term interest bearing investment grade securities until required for use. Any additional proceeds received from the exercise of the Company's outstanding warrants will be used for research and development and for general corporate and working capital purposes.

The Company intends to use the net proceeds of the Offering as follows:

	<u><i>Approximate Proceeds from the Minimum Offering⁽¹⁾</i></u>	<u><i>Approximate Proceeds from the Maximum Offering⁽¹⁾</i></u>
Complete and verify system design architecture, including performance testing in laboratory environment and design of surgeon simulation training modules	US \$6.2 million (CDN \$8.4 million)	-
Verify system performance in pre-clinical (live animals, swine), while establishing clear regulatory pathways for US and Europe	-	US \$12.5 million (CDN \$16.9 million)
Fund anticipated negative cash flow from operating activities and working capital	US \$1.5 million (CDN \$2.0 million)	US \$3.1 million (CDN \$4.2 million)
Total Net Proceeds	US \$7.7 million (CDN \$10.4 million)	US \$15.6 million (CDN \$21.1 million)

Note:

(1) Canadian figures are based on an exchange rate as of US \$1.00 = CDN \$[•] as of June [•], 2017.

Please see "Description of Business – Development Objectives" for a detailed description of the development milestones of the Company and the estimated costs associated therewith.

The Company intends to use the funds available to it as stated in this short form prospectus; however, there may be circumstances where, for sound business reasons, a reallocation of funds may be deemed prudent or necessary. See "Risk Factors - Risks Relating to the Offering and the Units".

Additional funding will be required, despite completion of the Offering, for the development and commercialization of the SPORT Surgical System, the estimated costs for which are discussed under "Description of Business – Development Objectives" of this short form prospectus. At May 31, 2017, management's unaudited estimate for the Company was that it had approximately US \$2.1 million in cash and cash equivalents on hand and working capital of approximately US \$1.2 million excluding warrant liability (which is a non-cash liability). The Company anticipates that it will be able to continue to operate for approximately 1 month from the date of this short form prospectus based on its estimated cash on hand and short term securities and its projected expenditures. This 1 month estimate assumes continued work on the SPORT Surgical System by the Company's contract manufacturer engaged by the Company at the current pace. If the full proceeds of the Minimum Offering are received by the Company, it is expected that the Company would be able to continue to operate for approximately four months from the date of this short form prospectus and to complete the scheduled milestone in Q3 2017, as set forth in the milestone table on pages 9-11. If the full proceeds of the Maximum Offering are received by the Company, it is expected that the Company would be able to continue to operate for approximately seven months from the date of this short form prospectus and to complete the scheduled milestone in Q4 2017, as set forth in the milestone table on pages 9-11. Each of these expectations of operating duration are based on the estimated amount of its cash on hand, short term securities, the projected proceeds from the Offering and anticipated expenditures. The Company expects that approximately US \$34.6 million gross, inclusive of this Offering, in incremental funding will be required to

fund the anticipated pace of development and operations through the first half of 2018. If significant funding is not available on a timely basis, the Company will need to reduce its development plan in order to continue as a going concern. See “Risk Factors”.

For the three months ended March 31, 2017, cash used in operating activities by the Company was US \$4.2 million (unaudited), and the Company had a net loss of US \$5.0 million (unaudited). The Company has not generated any revenue from product sales to date and it is possible that it will never have sufficient product sales revenue to achieve profitability and positive cash flow. Management expects that the Company will continue to incur losses for at least the next several years as it pursues further development of the SPORT Surgical System, pre-clinical studies and preparation for regulatory submittal. To become profitable, the Company must successfully develop, manufacture, market and sell the SPORT Surgical System, as well as related consumable products and accessories. Based on the highly competitive medical device market, it is possible that the Company will never achieve significant product sales revenue. If funding is insufficient at any time in the future, the Company may not be able to develop or commercialize its products, take advantage of business opportunities or respond to competitive pressures. It is expected that some of the proceeds from the Offering will be used to fund anticipated negative cash flow from operating activities, as described above and detailed below. See “Risk Factors”.

PLAN OF DISTRIBUTION

Pursuant to the Agency Agreement, the Company has agreed to sell and the Agents have agreed to arrange, on a best efforts basis, for purchasers of a minimum of [●] Units and a maximum of [●] Units at a price of US \$[●] per Unit payable in cash to the Company against delivery of the Units. The Units will immediately separate into Offered Shares, 2019 Warrants and 2021 Warrants upon issuance. The Offering Price was determined by negotiation between the Company and the Agents. Closing of the Offering is anticipated to occur on or about June [●], 2017 subject to the conditions of closing being met, or such earlier or later date as the Company and the Agents may agree. There can be no assurance that any or all of the Units being offered will be sold.

All sales in Canada will be made by the Canadian Agent. The US Agents are not registered as dealers in any Canadian jurisdiction and accordingly will not, directly or indirectly, solicit offers to purchase or sell the Offered Shares in Canada.

The Offering will be subject to subscriptions being received for the Minimum Offering. All funds received by the Agents will be held in trust until the Minimum Offering has been attained. All subscription funds received by the Agents will be returned, without any deductions, to investors if the Minimum Offering is not attained by the Closing Time.

The Warrants will be created and issued pursuant to the terms of the Warrant Indentures. Each whole 2019 Warrant will entitle the holder thereof to purchase one 2019 Warrant Share at an exercise price of US \$[●] per 2019 Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the date that is [●] months after the closing of the Offering, after which time the 2019 Warrants will expire and be void and of no value. Each whole 2021 Warrant will entitle the holder thereof to purchase one 2021 Warrant Share at an exercise price of US \$[●] per 2021 Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the date that is [●] months after the closing of the Offering, after which time the 2021 Warrants will expire and be void and of no value. The Warrant Indentures will contain provisions designed to protect the holders of Warrants against dilution upon the happening of certain events. No fractional Common Shares will be issued upon the exercise of any Warrants.

The obligations of the Agents under the Agency Agreement may be terminated by the Agents at any time at their sole discretion on the basis of their assessment of the state of the financial markets and on the occurrence of certain stated events. While the Agents have agreed to use their best efforts to sell the Units offered hereby, the Agents are not obligated to purchase Units that are not sold.

Subscriptions for the Units will be received subject to rejection or allotment in whole or in part and the right is reserved to close the subscription books at any time without notice. Pursuant to the Agency Agreement, the Company appointed the Canadian Agent to offer the Units to the public pursuant to the securities legislation of each of the provinces of British Columbia, Alberta and Ontario and the Company has appointed the US Agents to offer Units for sale in the United States pursuant to exemptions from the registration requirements under the U.S.

Securities Act and applicable state laws. In addition, the Agents are entitled to offer the Units outside of Canada and the United States to non-U.S. persons provided that the Agents shall not take any action in connection with the distribution of the Units that would result in the Company being obligated to comply with the prospectus, registration, reporting or other similar requirements of the securities laws of any jurisdiction.

In consideration of such services, the Company has agreed to pay the Agents' Commission of 7% of the gross proceeds of the Offering (or US \$[●] per Unit) sold by the Agents, excluding the gross proceeds raised through the sale of Units to President's List Subscribers.

The Company has also agreed to grant a number of Broker Warrants to the Agents equal to 7% of the aggregate number of Units issued pursuant to the Offering, excluding those Units issued to President's List Subscribers. Each Broker Warrant shall be exercisable for a period of 24 months following the Closing Date for one Broker Warrant Share at an exercise price equal to the Offering Price. This short form prospectus qualifies the grant of the Broker Warrants.

Certificates evidencing Offered Shares, Warrants and Warrant Shares will not be issued unless a request for a certificate is made to the Company. Physical certificates evidencing the Offered Shares and Warrants will be distributed to purchasers in the United States who meet the definition of a U.S. Institutional Accredited Investor.

The Company intends to apply to list the Offered Shares, the Warrant Shares and the Broker Warrant Shares distributed under this short form prospectus on the TSX. Listing will be subject to the Company fulfilling the listing requirements of the TSX. The Company has not applied and does not intend to apply to list the Warrants on any securities exchange. There will be no market through which the Warrants may be sold and purchasers may not be able to resell the Warrants purchased in the Offering. This may affect the pricing of the Warrants in the secondary market, the transparency and availability of trading prices, the liquidity of the Warrants, and the extent of issuer regulation. See "Description of Offered Securities – Warrants".

The Company has agreed to indemnify the Agents and their respective directors, officers, employees, shareholders and agents against any and all fees, costs, expenses, losses, claims, actions, damages, fines, penalties, or liabilities of any nature whatsoever, joint or several, that arise out of or are based, directly or indirectly, upon the performance of the professional services rendered to the Company by the Agents or their respective directors, officers, employees, shareholders or agents pursuant to the Agency Agreement. This indemnity does not apply to the extent such fees, costs, expenses, losses, claims, actions, damages, fines, penalties, or liabilities as to which indemnification is claimed arise solely out of gross negligence or wilful misconduct in the performance of such professional services.

Pursuant to policy statements of certain Canadian provincial securities commissions and similar authorities, the Canadian Agent may not, throughout the period of distribution, bid for or purchase Common Shares. The foregoing restriction is subject to certain exceptions, on the conditions that the bid or purchase not be engaged in for the purpose of creating actual or apparent active trading in, or raising the price of, the Common Shares. These exceptions include a bid or purchase permitted under the Universal Market Integrity Rules administered by the Investment Industry Regulatory Organization of Canada relating to market stabilization and passive market making activities and a bid or purchase made for and on behalf of a customer where the order was not solicited during the period of distribution. Subject to applicable laws, pursuant to the first-mentioned exception, in connection with the Offering, the Canadian Agent may effect transactions which stabilize or maintain the market price of the Common Shares at a level above that which might otherwise prevail on the open market. Such transactions, if commenced, may be discontinued at any time.

The Offered Shares and Warrants comprising the Units, and the Warrant Shares issuable on the exercise of the Warrants have not been and will not be registered under the U.S. Securities Act or any securities or "blue sky" laws of any of the states of the United States, and may not be offered or sold, directly or indirectly, within the United States or to, or for the account or benefit of, U.S. persons except in accordance with an exemption from the registration requirements of the U.S. Securities Act and applicable state securities laws. Except as permitted in the Agency Agreement, and as expressly permitted by applicable laws of the United States, the Agents will not offer, sell or deliver the Units within the United States or to, or for the account or benefit of U.S. Persons. The Agency Agreement enables the US Agents to offer and sell the Units in the United States to U.S. Institutional Accredited

Investors and “qualified institutional buyers” within the meaning of Rule 144A under the U.S. Securities Act (“Qualified Institutional Buyers”), provided such offers and sales are made in compliance with Rule 506(b) of Regulation D under the U.S. Securities Act and/or Section 4(a)(2) of the U.S. Securities Act and applicable state securities laws. Moreover, the Agency Agreement provides that the US Agents will offer and sell the Units outside the United States only in accordance with Rule 903 of Regulation S under the U.S. Securities Act. The Units that are sold in the United States or to, or for the account or benefit of, a U.S. Person will be restricted securities within the meaning of Rule 144(a)(3) of the U.S. Securities Act and will carry resale restrictions to the effect that such securities may only be offered, sold or otherwise transferred pursuant to certain exemptions from the registration requirements of the U.S. Securities Act.

This short form prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, any of the Units within the United States. In addition, until 40 days after the commencement of the Offering, an offer or sale of the Units offered hereby within the United States by a dealer (whether or not participating in the Offering) may violate the registration requirements of the U.S. Securities Act unless such offer or sale is made pursuant to an exemption under the U.S. Securities Act.

RISK FACTORS

Investing in our securities is speculative and involves a high degree of risk. You should carefully consider the risks set out below and under the heading “Risk Factors” beginning on page 9 of the AIF, and the other documents we have incorporated by reference in this short form prospectus that summarize the risks that may materially affect our business before making an investment in our securities. Please see “Documents Incorporated by Reference”. If any of these risks occur, our business, results of operations or financial condition could be materially adversely affected. In that case, the trading price of our securities could decline, and you may lose all or part of your investment. The risks set out in the documents indicated above are not the only risks we face. You should also refer to the other information set forth in this short form prospectus as well as those incorporated by reference herein and therein, including our financial statements and the related notes.

Risk Factors Related to the Company

History of Losses

The Company has a history of losses, and there is no assurance that any of its contemplated products will generate sustainable earnings, be profitable or provide a return on investment in the future. The Company has not paid dividends in the past. Its directors will determine the future dividend policy of the Company if the Company generates earnings in the future, based on operational circumstances at that time. The Company had negative cash flow from operating activities for its fiscal year ended December 31, 2016 and this negative cash flow is expected to continue.

Profitability

There is no assurance that the Company will earn profits in the future, or that profitability will be sustained. The medical device industry requires significant financial resources, and there is no assurance that future revenues will be sufficient to generate the funds required to continue the Company’s business development and marketing activities. If the Company does not have sufficient capital to fund its operations, it may be required to reduce its research and development efforts or in the future reduce its marketing efforts or forego certain business opportunities.

Going Concern

The Company will require additional financing in order to continue its research and development program through to completion and take advantage of future opportunities. The ability of the Company to arrange such financing in the future will depend in part upon prevailing capital market conditions, as well as upon 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 respond to competitive pressures and the Company will need to reduce its development plan in order to continue as a going concern.

Reliance on External Suppliers and Development Firms

The Company is dependent on external suppliers and development firms to conduct our technology research and development and manufacturing of evaluation units of the SPORT Surgical System. If these external firms seek to impose conditions on their obligations to conduct their work for the Company in addition to or different from the terms set forth in their engagement agreements and the Company is unable to satisfy those conditions or they do not otherwise perform as contractually required or expected, the Company may not be able to complete the development of the SPORT Surgical System, or may be delayed in doing so, and the costs for developing our products may significantly increase beyond those forecasted. In the event that the external development firms do not resume, or they do not otherwise carry on, the development work on the SPORT Surgical System on conditions and in a manner that is agreeable to the Company, it may engage other firms to take on the development work and in that case, the estimated costs of the development milestones set forth in this short form prospectus may increase and the schedule for completion of each milestone may be delayed.

The Company relies heavily on external parties for successful execution of the SPORT Surgical System development program, but do not control many aspects of their activities. As a result, many important aspects (including costs and timing) of our product development are outside our direct control.

The Company is responsible for ensuring that the SPORT Surgical System is being developed to meet the guidelines and requirements of the FDA and other regulatory authorities, applicable laws and regulations and industry standards. The Company's reliance on third parties does not relieve it of these responsibilities.

Additionally, if the external firms conducting pre-clinical studies do not perform their contractual duties or obligations, do not meet expected deadlines, fail to comply with the good laboratory practice regulations, do not adhere to specified study protocols or otherwise fail to generate reliable clinical data, development, approval and commercialization of the Company's products, may be extended, delayed or terminated or may need to be repeated, costs may significantly increase and the Company may not be able to obtain regulatory approval within the time frames forecasted, if at all.

Trademarks

We do not own or license any trademark registrations for the marks and names that we are currently using in connection with our products under development, or for our company's name, in any jurisdiction including the proposed principal markets where we plan to market and sell the SPORT Surgical System following regulatory approval and commercialization of our surgical system. We may be unable to obtain or maintain trademark registrations for the marks and names we use in one or more countries. It is possible that our use of "SPORT", "SPORT Surgical System", "Titan", "Titan Medical" or variations thereof may infringe or contravene the rights, including trademark rights, of other parties in one or more countries. In the event of actual or alleged infringement or contravention of rights, we may be forced to cease using these marks and names. There may be a substantial risk of litigation or other legal proceedings in one or more countries relating to the alleged infringement or contravention of another party's trademark rights. These proceedings may occur even if we cease using these marks and names. We may incur substantial costs to defend and/or enforce our rights, if any, in these marks and names in such legal proceedings. We may not be successful in such legal proceedings, and may be required or agree to cease using these marks and names and pay other parties significant amounts of money. We may incur substantial costs to change the names and marks used by our company, including the names and marks used in association with our products. In any such events, the business and operations of the Company could be materially adversely affected.

Changes in Senior Management of the Company

The future success of the Company will depend in part on the ability of the Company and its senior management team to manage the resulting transition as a result of leadership changes and to avoid or minimize disruption to the operations of the Company.

Risk Factors Related to the Offering and the Units

There can be no assurance that the Offering will be completed

The completion of the Offering is subject to the completion of definitive binding documentation and satisfaction of a number of conditions. There can be no certainty that the Offering will be completed.

There may be no market for the Warrants

The Company has not applied and does not intend to apply to list the Warrants on any securities exchange. There will be no market through which the Warrants may be sold and purchasers may not be able to resell the Warrants purchased in the Offering. This may affect the pricing of the Warrants in the secondary market, the transparency and availability of trading prices, the liquidity of the Warrants, and the extent of issuer regulation. The Offering Price and the allocation thereof between the Offered Shares and the Warrants comprising the Units have been determined by negotiations between the Company and the Agents.

Enforcement of judgments against foreign persons may not be possible

Canadian investors should be aware that David McNally, the President and Chief Executive Officer and a director of the Company, and Dr. Bruce Wolff, a director of the Company, each resides outside of Canada; as a result, it may not be possible for purchasers of the Units to effect service of process within Canada upon David McNally or Dr. Wolff. All or a substantial portion of the assets of each of David McNally and Dr. Wolff are likely to be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against David McNally or Dr. Wolff in Canada or to enforce a judgment obtained in Canadian courts against David McNally or Dr. Wolff outside of Canada.

The Company is subject to risks related to additional regulatory burden and controls over financial reporting

The Company is subject to the continuous and timely disclosure requirements of Canadian securities laws and the rules, regulations and policies of the TSX and the OTCQB. These rules, regulations and policies relate to, among other things, corporate governance, corporate controls, internal audit, disclosure controls and procedures and financial reporting and accounting systems. The Company has made, and will continue to make, changes in these and other areas, including the Company's internal controls over financial reporting. However, there is no assurance that these and other measures that it may take will be sufficient to allow the Company to satisfy its obligations as a public company on a timely basis. In addition, compliance with reporting and other requirements applicable to public companies create additional costs for the Company and require the time and attention of management of the Company. The Company cannot predict the amount of the additional costs that the Company may incur, the timing of such costs or the impact that management's attention to these matters will have on the Company's business. In addition, the Company's inability to maintain effective internal controls over financial reporting could increase the risk of an error in its financial statements. The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives due to its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is therefore subject to error, improper override or improper application of the internal controls. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis, and although it is possible to incorporate safeguards into the financial reporting process to reduce this risk, they cannot be guaranteed to entirely eliminate it. If the Company fails to maintain effective internal control over financial reporting, then there is an increased risk of an error in the Company's financial statements that could result in the Company being required to restate previously issued financial statements at a later date.

ELIGIBILITY FOR INVESTMENT

In the opinion of Borden Ladner Gervais LLP, counsel for the Company, and Baker & McKenzie LLP, counsel to the Canadian Agent, based on the provisions of the *Income Tax Act* (Canada) (the “Tax Act”) and the regulations thereunder (the “Regulations”) in force as of the date hereof,

- the Offered Shares and Warrant Shares will, on the date of issue, be qualified investments for trusts governed by registered retirement savings plans (each a “RRSP”), registered education savings plans (each a “RESP”), registered retirement income funds (each a “RRIF”), registered disability savings plans (each a “RDSP”), deferred profit sharing plans and tax-free savings accounts (each a “TFSA”), all within the meaning of the Tax Act (collectively, “Plans”) provided that the Offered Shares and Warrant Shares are listed on a “designated stock exchange” as defined in the Tax Act (which includes the TSX); and
- the Warrants will, on the date of issue, be qualified investments for Plans provided that either (i) the Warrants are listed on a “designated stock exchange” as defined in the Tax Act (which includes the TSX), or (ii) the Warrant Shares are listed on a “designated stock exchange” as defined in the Tax Act (which includes the TSX) and the Company is not, and deals at arm’s length with each person who is, an annuitant, a beneficiary, an employer or a subscriber under or a holder of such Plan.

Notwithstanding the foregoing, if the Offered Shares, Warrant Shares or Warrants held by a TFSA, RRSP or RRIF are “prohibited investments” for purposes of the Tax Act, the holder of the TFSA or the annuitant of the RRSP or RRIF will be subject to a penalty tax as set out in the Tax Act. The Offered Shares, Warrant Shares and Warrants will be a “prohibited investment” if the holder of a TFSA or the annuitant of a RRSP or RRIF, as the case may be: (i) does not deal at arm’s length with the Company for purposes of the Tax Act; or (ii) has a “significant interest” (within the meaning of the Tax Act) in the Company. In addition, the Offered Shares, Warrant Shares and Warrants will not be a “prohibited investment” if the Offered Shares, Warrant Shares and Warrants are “excluded property”, as defined in the Tax Act, for a TFSA, RRSP or RRIF. Pursuant to proposals to amend the Tax Act announced on March 22, 2017, the rules in respect of “prohibited investments” are also proposed to apply to RDSPs and holders thereof and to RESPs and subscribers thereof with respect to investments acquired (or deemed to be acquired) after March 22, 2017 with some exceptions. Holders who intend to hold Offered Shares, Warrant Shares or Warrants in a TFSA, RRSP, RRIF, RDSP or RESP should consult their own tax advisors in this regard.

CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS

In the opinion of Borden Ladner Gervais LLP, counsel to the Company, and Baker & McKenzie LLP, counsel to the Canadian Agent, the following is, as of the date hereof, a summary of the principal Canadian federal income tax considerations generally applicable under the Tax Act and Regulations thereunder to the acquisition, holding and disposition of Offered Shares, Warrant Shares or Warrants by a holder (“Holder” and collectively, the “Holders”) who acquires Units pursuant to this short form prospectus. For the purposes of this summary, the term “Common Shares” shall also include the Offered Shares and any Warrant Shares acquired upon the exercise of the Warrants, unless the context otherwise requires. This summary is applicable to a Holder who, for the purposes of the Tax Act and at all relevant times, is resident in Canada, deals at arm’s length with, and is not affiliated with the Company and holds Common Shares and Warrants as capital property. Generally, the Common Shares or Warrants will be considered to be capital property to a Holder provided that the Holder does not hold such Common Shares or Warrants in the course of carrying on a business of trading or dealing in securities and has not acquired them in one or more transactions considered to be an adventure or concern in the nature of trade. Certain Holders who might not otherwise be considered to hold Common Shares as capital property may, in certain circumstances, be entitled to have such Common Shares (but, for avoidance of doubt, not Warrants) and all other “Canadian securities” as defined in the Tax Act owned by them in the year in which the election is made and all subsequent taxation years treated as capital property by making an irrevocable election under subsection 39(4) of the Tax Act. **Holders contemplating such an election should consult their own advisors.**

This summary is not applicable to a Holder: (i) that is a “financial institution” for purposes of the “mark-to-market” rules in the Tax Act; (ii) that is a “specified financial institution” within the meaning of the Tax Act; (iii) that reports its “Canadian tax results” within the meaning of the Tax Act in a currency other than Canadian currency; (iv) an interest in which is, or for whom a Common Share would be, a “tax shelter investment” within the meaning of the Tax Act; (v) that has entered or will enter into a “derivative forward agreement” or “synthetic disposition

agreement”, each within the meaning of the Tax Act, in respect of Common Shares and/or Warrants; or (vi) that receives dividends on Common Shares under or as part of a "dividend rental arrangement" within the meaning of the Tax Act.

This summary is based upon the current provisions of the Tax Act and the Regulations thereunder in force as of the date hereof, all specific proposals to amend the Tax Act and Regulations thereunder (the “Tax Proposals”) which have been announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof, and counsel’s understanding of the current administrative policies and assessing practices of the Canada Revenue Agency (the “CRA”) which have been made publicly available prior to the date hereof. This summary assumes that the Tax Proposals will be enacted in the form proposed and does not take into account or anticipate any other changes in law or in the administrative policies or assessing practices of the CRA, whether by way of judicial, legislative or governmental decision or action, nor does it take into account provincial, territorial or foreign income tax legislation or considerations, which may differ from the Canadian federal income tax considerations discussed herein. No assurances can be given that the Tax Proposals will be enacted as proposed or at all, or that legislative, judicial or administrative changes will not modify or change the statements expressed herein.

This summary is not exhaustive of all possible Canadian federal income tax considerations applicable to an investment in Common Shares or Warrants. Accordingly, this summary is of a general nature only and is not intended to be, nor should it be construed to be, legal or tax advice to any investor. Investors should consult their own tax advisors for advice with respect to the tax consequences of an investment in Common Shares and Warrants, based on their particular circumstances.

Currency Conversion

For purposes of the Tax Act, all amounts relating to the acquisition, holding or disposition of Common Shares and Warrants (including dividends, adjusted cost base and proceeds of disposition) must generally be expressed in Canadian Dollars. Amounts denominated in any other currency must be converted into Canadian Dollars generally based on the exchange rate quoted by the Bank of Canada for noon on the date such amounts arise or such other rate of exchange as is acceptable to the Minister of National Revenue (Canada).

Acquisition of Common Shares and Warrants

A reasonable allocation of the Offering Price between the Offered Share and the Warrant that comprise each Unit will be required to determine the cost of each to the Holder for purposes of the Tax Act. The Company has advised its counsel that, of the US \$[●] Offering Price per Unit, the Company intends to allocate US \$[●] to the Offered Share, US \$[●] to the one-half 2019 Warrant and US \$[●] to the one-half 2021 Warrant. Although the Company believes that such allocation is reasonable, it is not binding on the CRA or any Holder and the CRA may not agree with such allocation. Counsel expresses no opinion with respect to such allocation.

When Common Shares (including an Offered Share) or Warrants are acquired by a Holder who already owns Common Shares or Warrants, the cost of newly acquired Common Shares or Warrants will be averaged with the adjusted cost base of all Common Shares or Warrants, respectively, owned by the Holder as capital property before that time for the purpose of determining the Holder’s adjusted cost base of all Common Shares and Warrants, as the case may be, held by such person.

Exercise of Warrants

The exercise of a Warrant to acquire a Warrant Share will be deemed not to constitute a disposition of property for purposes of the Tax Act and consequently no gain or loss will be realized by a Holder upon such an exercise. When a Warrant is exercised, the Holder’s cost of the Warrant Share acquired thereby will be equal to the aggregate of the Holder’s adjusted cost base of such Warrant and the exercise price paid for the Warrant Share. The Holder’s adjusted cost base of the Warrant Share so acquired will be determined by averaging such cost with the adjusted cost base to the Holder of all other Common Shares owned by the Holder and held as capital property immediately prior to such acquisition.

Expiry of Warrants

In the event of the expiry of an unexercised Warrant, the Holder will realize a capital loss equal to the Holder's adjusted cost base of such Warrant. The tax treatment of capital gains and losses is discussed in greater detail below under the subheading "Capital Gains and Losses".

Dividends

Dividends received or deemed to be received on the Common Shares will be included in computing the Holder's income. In the case of a Holder that is an individual (other than certain trusts) such dividends will be subject to the gross-up and dividend tax credit rules applicable in respect of taxable dividends received from "taxable Canadian corporations" (as defined in the Tax Act). An enhanced dividend tax credit will generally be available to a Holder that is an individual in respect of dividends designated by the Company as "eligible dividends". There may be limitations on the ability of the Company to designate dividends as "eligible dividends". Individuals (other than certain trusts) may be subject to alternative minimum tax in respect of taxable dividends.

In the case of a Holder that is a corporation, the amount of any such taxable dividends that is included in its income for a taxation year received or deemed to be received on the Common Shares will generally be deductible in computing its taxable income for that taxation year. In certain circumstances, subsection 55(2) of the Tax Act will treat a taxable dividend received by a Holder that is a corporation as proceeds of disposition or a capital gain. Holders that are corporations should consult their own tax advisors having regard to their own circumstances.

Holders that are "private corporations" (as defined in the Tax Act) or "subject corporations" (as defined in the Tax Act) may be subject to a refundable tax under Part IV of the Tax Act on dividends received (or deemed to be received) on the Common Shares to the extent such dividends are deductible in computing the Holder's taxable income for the year. This refundable tax generally will be refunded to a Holder that is a corporation when sufficient taxable dividends are paid to its shareholders while it is a private corporation or subject corporation.

Disposition of Common Shares and Warrants

A disposition or deemed disposition by a Holder of Common Shares (other than on a purchase for cancellation by the Company) or Warrants (which, as discussed above, does not include an exercise of Warrants to acquire such Warrant Shares) will generally give rise to a capital gain (or capital loss) equal to the amount by which the proceeds of disposition, net of reasonable costs of disposition, are greater (or less) than such Holder's adjusted cost base of such Common Shares or Warrants, as the case may be, immediately before the disposition or deemed disposition.

The tax treatment of capital gains and losses is discussed in greater detail below under the subheading "Capital Gains and Losses".

Capital Gains and Losses

Generally, one-half of any capital gain will be included in the Holder's income as a taxable capital gain and one-half of any capital loss must normally be deducted as an allowable capital loss against taxable capital gains realized in the taxation year of disposition or deemed disposition to the extent and under the circumstances described in the Tax Act. Any unused allowable capital losses may be applied to reduce net taxable capital gains realized in the three preceding taxation years or any subsequent taxation year to the extent and in the circumstances prescribed in the Tax Act.

If the Holder is a corporation, any capital loss arising on the disposition or deemed disposition of a Common Share may, in certain circumstances be reduced by the amount of any dividends previously received or deemed to have been previously received on the Common Share. Similar rules may apply to reduce any capital loss in respect of the disposition or deemed disposition of Common Shares held by a trust or partnership of which a corporation, partnership or trust is a member or beneficiary. Holders to whom these rules may be relevant should consult their own tax advisors.

A Holder that is a “Canadian-controlled private corporation” (as defined in the Tax Act) may be required to pay an additional refundable tax on certain investment income, including taxable capital gains. Individuals (other than certain trusts) may be subject to alternative minimum tax in respect of capital gains.

Holders should consult and rely on their own tax advisors with respect to the application of these additional taxes based on their own particular circumstances.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the Common Shares is Computershare Investor Services Inc., at its principal office in Toronto, Ontario, Canada.

EXPERTS

The Company’s financial statements as at December 31, 2016 incorporated by reference in this short form prospectus have been audited by BDO Canada LLP, independent auditors, as set forth in their report incorporated by reference in this short form prospectus. BDO Canada LLP is independent with respect to the Company within the meaning of the Rules of Professional Conduct of the Institute of Chartered Professional Accountants of Ontario.

LEGAL MATTERS

Certain legal matters relating to this offering and the validity of the securities offered by this short form prospectus are being passed upon for us by Borden Ladner Gervais LLP, Toronto, Ontario and on behalf of the Canadian Agent by Baker & McKenzie LLP.

As of June 7, 2017, the “designated professionals” (as such term is defined in Form 51-102F2 – *Annual Information Form*) of each of Borden Ladner Gervais LLP and Baker & McKenzie LLP, respectively, beneficially owned, directly or indirectly, less than 1% of our issued and outstanding securities.

PURCHASERS’ STATUTORY RIGHTS AND CONTRACTUAL RIGHTS OF WITHDRAWAL AND RESCISSION

Securities legislation in certain of the provinces of Canada provides purchasers with the right to withdraw from an agreement to purchase securities. This right may be exercised within two business days after receipt or deemed receipt of a prospectus and any amendment. In several of the provinces, the securities legislation further provides a purchaser with remedies for rescission or, in some jurisdictions, revisions of the price or damages, if the prospectus and any amendment contains a misrepresentation or is not delivered to the purchaser, provided that the remedies for rescission, revisions of the price or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser’s province. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser’s province for the particulars of these rights or consult with a legal adviser.

Original purchasers of securities issued under this short form prospectus which are convertible, exchangeable or exercisable into other securities of the Company (“Convertible Securities”) will have a contractual right of rescission against the Company in respect of the conversion, exchange or exercise of such Convertible Securities. The contractual right of rescission will entitle such original purchasers to receive the amount paid upon conversion, exchange or exercise of such Convertible Securities, upon surrender of the securities issued to such purchaser upon conversion, exchange or exercise of such Convertible Securities (or any convertible securities issued upon the conversion of such Convertible Securities, if applicable), in the event that this short form prospectus contains a misrepresentation, provided that: (i) the conversion, exchange or exercise takes place within 180 days of the date of the purchase of the Convertible Securities under this short form prospectus; and (ii) the right of rescission is exercised within 180 days of the date of the purchase of such Convertible Securities under this short form prospectus. This contractual right of rescission will be consistent with the statutory right of rescission described under section 130 of the *Securities Act* (Ontario), and is in addition to any other right or remedy available to original purchasers of Convertible Securities under section 130 of the *Securities Act* (Ontario) or otherwise at law.

Original purchasers of Convertible Securities are cautioned that the statutory right of action for damages for a misrepresentation contained in a prospectus is, under the securities legislation of certain provinces, limited to the price at which such Convertible Securities were offered to the public under the prospectus offering. This means that, under the securities legislation of certain provinces, if the purchaser pays additional amounts upon conversion, exchange or exercise of the security, those amounts may not be recoverable under the statutory right of action for damages that applies in those provinces. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province for the particulars of this right of action for damages, or consult with a legal advisor.

CERTIFICATE OF THE COMPANY

Dated: June 8, 2017

This short form prospectus, together with the documents incorporated by reference, constitutes full, true and plain disclosure of all material facts relating to the securities offered by this short form prospectus as required by the securities legislation of British Columbia, Alberta and Ontario.

TITAN MEDICAL INC.

(SIGNED) "*David McNally*"
Chief Executive Officer

(SIGNED) "*Stephen Randall*"
Chief Financial Officer

On behalf of the Board of Directors of Titan Medical Inc.

(SIGNED) "*Martin Bernholtz*"
Director

(SIGNED) "*John Barker*"
Director

CERTIFICATE OF THE AGENT

Dated: June 8, 2017

To the best of our knowledge, information and belief, this short form prospectus, together with the documents incorporated by reference, constitutes full, true and plain disclosure of all material facts relating to the securities offered by this short form prospectus as required by the securities legislation of British Columbia, Alberta and Ontario.

BLOOM BURTON SECURITIES INC.

(SIGNED) "*Jolyon Burton*"
President and Head of Investment Banking