

*A copy of this amended and restated 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 amended and restated 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. This short form prospectus constitutes a public offering of these securities only in those jurisdictions where they may be lawfully offered for sale and therein only by persons permitted to sell such securities.*

*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](http://www.sedar.com).*

## **Amended And Restated Preliminary Short Form Prospectus Dated October 15, 2019, Amending And Restating the Preliminary Short Form Prospectus Dated September 23, 2019**

New Issue

October 15, 2019



**TITAN MEDICAL INC.**

**Minimum: US \$15,000,000 ([●] Units)**

**Maximum: US \$25,000,000 ([●] Units)**

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**Price: US \$[●] per Unit**

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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 one common share of the Company (an “Offered Share”) and one common share purchase warrant of the Company (a “Warrant”). Each Warrant entitles the holder thereof to purchase one common share of the Company (a “Warrant Share”) at an exercise price of US \$[●] per Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the date that is [●] months after the first Closing Date (as defined herein) of the Offering (as defined herein) (the “Warrant Expiry Time”). The Units will immediately separate into Offered Shares and 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 Nasdaq Capital Market (“Nasdaq”) under the symbol “TMDI”. On October 11, 2019, the last trading day on the TSX prior to the date of this short form prospectus, the closing price of the Common Shares on the TSX was CDN \$1.41. On October 14, 2019, the last trading day on the Nasdaq prior to the date of this short form prospectus, the closing price of the Common Shares on the Nasdaq was US \$1.07. The Company intends to apply to the TSX to list the Offered Shares, the Warrant Shares, the Over-Allotment Shares (as defined herein), the Over-Allotment Warrant Shares (as defined herein) and the Broker Warrant Shares (as defined herein) distributed under this short form prospectus on the TSX. The Company will notify Nasdaq of the listing of the Offered Shares, the Warrant Shares, the Over-Allotment Shares, the Over-Allotment Warrant Shares and the Broker Warrant Shares distributed under this short form prospectus on the Nasdaq. Listing will be subject to the Company fulfilling all of the listing requirements of the TSX and Nasdaq. There can be no assurance that the securities offered pursuant to this short form prospectus will be accepted for listing on the TSX or the Nasdaq. The Company does not intend to apply to list the Warrants or the Over-Allotment Warrants (as defined herein) on any

securities exchange. **There will be no market through which the Warrants or the Over-Allotment Warrants may be sold and purchasers may not be able to resell the Warrants or the Over-Allotment Warrants purchased in the Offering. This may affect the pricing of the Warrants or the Over-Allotment Warrants in the secondary market, the transparency and availability of trading prices, the liquidity of the Warrants or the Over-Allotment 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 “Agent”). Pursuant to the terms of an agency agreement (the “Agency Agreement”) entered into between the Company and the Agent, the Units will be issued and sold in the provinces of British Columbia, Alberta and Ontario by the Agent. The Units will also be offered for sale in the United States, by or through one or more United States registered broker-dealers appointed by the Agent as sub-agents, pursuant to the Multijurisdictional Disclosure System (“MJDS”) implemented by securities regulatory authorities in the United States and Canada. 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 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.**

	Price: US \$[●] per Unit		
	Price to the Public	Agent’s Commission <sup>(1)</sup>	Net Proceeds to the Company <sup>(2)</sup>
Per Unit <sup>(3)</sup> .....	US \$[●]	US \$[●]	US \$[●]
Minimum Offering <sup>(4)</sup> .....	US \$[●]	US \$[●]	US \$[●]
Maximum Offering <sup>(4)</sup> .....	US \$[●]	US \$[●]	US \$[●]

**Notes:**

- (1) The Company has agreed to pay the Agent, on each Closing Date, a commission (the “Agent’s Commission”) equal to 7% of the aggregate gross proceeds of the Offering (or US \$[●] per Unit) including any proceeds raised through the sale of Over-Allotment Units (as defined herein) and/or Over-Allotment Warrants pursuant to the exercise of the Over-Allotment Option (as defined herein). In addition to the Agent’s Commission, the Company will issue to the Agent, on each Closing Date, 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 and Over-Allotment Units issued pursuant to the Offering on such Closing Date. Each Broker Warrant, whether issued on the first Closing Date or on a subsequent Closing Date, shall entitle the Agent to acquire one Broker Warrant Share at an exercise price equal to the Offering Price, subject to adjustment, for a period of 24 months following the first Closing Date. See “Plan of Distribution”. This short form prospectus also qualifies the distribution of the Broker Warrants.
- (2) After deducting the Agent’s 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 gross proceeds of the Offering.
- (3) From the Offering Price, the Company will allocate US \$[●] to each Offered Share and US \$[●] to each Warrant.
- (4) Assuming no exercise of the Over-Allotment Option.
- (5) The Company has granted the Agent an option (the “Over-Allotment Option”), exercisable in whole or in part at any time and from time to time on the first Closing Date or for a period of 30 days following the first Closing Date, to offer for sale such number of additional Units (the “Over-Allotment Units”) and/or Warrants (the “Over-Allotment Warrants”) as is equal to 15% of the number of Units issued under the Offering, solely to cover over-allotments, if any, and for market stabilization purposes. The Over-Allotment Option may be exercised by the Agent in respect of: (i) Over-Allotment Units at the Offering Price; (ii) Over-Allotment Warrants at a price of US \$[●] per Over-Allotment Warrant; or (iii) any combination of Over-Allotment Units and/or Over-Allotment Warrants, so long as the aggregate number of Over-Allotment Units and Over-Allotment Warrants does not exceed 15% of the number of Units issued under the Offering (excluding the Over-Allotment Option). Unless the context otherwise requires, references to the Units herein shall include the Over-Allotment Units and references to Warrants herein shall include the Over-Allotment Warrants. The Common Shares that are included in the Over-Allotment Units are referred to herein as the “Over-Allotment Shares” and the Common Shares issuable upon exercise of the Over-Allotment Warrants (including Warrants issuable as part of the Over-Allotment Units) are referred to herein as the “Over-Allotment Warrant Shares”. If the Agent exercises the Over-Allotment Option in full under the Maximum Offering for Over-Allotment Units, the total price to the public will be US \$[●], the aggregate Agent’s Commission will be US \$[●], and the net proceeds to the Company, before deducting the estimated expenses of the Offering, will be US \$[●]. **This short form prospectus qualifies the grant of the Over-Allotment Option and the distribution of the Over-Allotment Units and/or Over-Allotment Warrants. A purchaser who acquires securities forming part of the Agent’s over-allocation position acquires those securities under this short form prospectus, regardless of whether such over-allocation position is ultimately filled through the exercise of the Over-Allotment Option or through secondary market purchases. See “Plan of Distribution”.**

The following table sets out the number of Over-Allotment Units/Over-Allotment Warrants and Broker Warrants that may be issued by the Company to the Agent:

<b>Agent's Position</b>	<b>Minimum Offering</b>	<b>Maximum Offering</b>	<b>Exercise Period</b>	<b>Exercise Price</b>
Over-Allotment Option	Up to [●] Over-Allotment Units and/or Over-Allotment Warrants	Up [●] Over-Allotment Units and/or Over-Allotment Warrants	From the date of the Agency Agreement to 30 days following the first Closing Date	US \$[●] per Over-Allotment Unit and/or US \$[●] per Over-Allotment Warrant
Broker Warrants <sup>(1)</sup>	[●] Broker Warrants	[●] Broker Warrants	24 months following the first Closing Date	US \$[●] per Broker Warrant Share

**Note:**

- (1) Assuming no exercise of the Over-Allotment Option.

Subscriptions for Units will be received by the Agent 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. It is anticipated that the Offered Shares and Warrants will be issued in “book-entry only” form and represented by a global certificate or certificates, or be represented by uncertificated securities, registered in the name of CDS Clearing and Depository Services Inc. (“CDS”) or its nominee or The Depository Trust Company (“DTC”), as directed by the Agent, and will be deposited with CDS or DTC, as the case may be. Except in limited circumstances, no beneficial holder of Offered Shares or Warrants will receive definitive certificates representing their interest in the Offered Shares or Warrants. Beneficial holders of Offered Shares or Warrants will receive only a customer confirmation from the Agent or another registered dealer who is a CDS or DTC participant and from or through whom a beneficial interest in the Offered Shares or Warrants is acquired. Certain other holders may receive definitive certificates representing their interests in the Offered Shares or Warrants.

The completion of the Offering may occur in one or more separate closings on one or more dates (each, a “Closing Date”) as the Company and the Agent may agree. Provided that the Minimum Offering is subscribed for, it is expected that the first Closing Date will occur on or about October 24, 2019, or such other date as the Company and the Agent may agree.

If subscriptions for the Minimum Offering have not been received within 10 days following the date of issuance of a receipt for the final short form prospectus, the Offering will not continue and the subscription proceeds will be returned to subscribers, without interest or deduction. In any event, the total period of the distribution will not end more than 45 days from the date of issuance of a receipt for this short form prospectus. Should a closing occur in respect of the Minimum Offering, one or more additional closings, if necessary, may occur until the earlier of the Maximum Offering being subscribed and the expiry of the 45-day period.

There can be no assurance that any or all of the Units being offered will be sold. Please see “*Plan of Distribution*”.

The Offering is not underwritten or guaranteed by any person. The 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 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, with respect to Canadian legal matters, and by Dorsey & Whitney LLP, with respect to U.S. legal matters, and on behalf of the Agent by Baker & McKenzie LLP. The United States registered broker-dealers that may be appointed by the Agent as sub-agents will not be registered as dealers in any Canadian jurisdiction and, accordingly, they will not, directly or indirectly, solicit offers to purchase or sell the Units in Canada. In connection with this distribution, the Agent may over-allot or effect transactions that stabilize or maintain the market price of the Common Shares at levels other than those which otherwise might prevail on the open market. If these activities are commenced, they may be discontinued by the Agent at any time. See “*Plan of Distribution*”.

You should rely only on the information contained or incorporated by reference in this short form prospectus and the documents incorporated by reference herein. The Company and the Agent 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. 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. 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.

**This offering is made by a “foreign issuer” under U.S. securities laws that is permitted, under the MJDS, to prepare this short form prospectus in accordance with Canadian disclosure requirements. Prospective investors should be aware that such requirements are different from those of the United States. Except as otherwise disclosed, financial statements included or incorporated by reference herein have been prepared in accordance with International Financial Reporting Standards (“IFRS”), as issued by the International Accounting Standards Board, and are subject to Canadian auditing and auditor independence standards, and thus may not be comparable to financial statements of United States companies.**

**Prospective investors should be aware that the acquisition of the Units described herein may have tax consequences both in the United States and Canada. Such consequences for investors who are resident in, or citizens of, the United States may not be fully described herein. See “*Certain Canadian Federal Income Tax Considerations*” and “*Certain United States Federal Income Tax Considerations*” in this short form prospectus.**

**The enforcement by investors of civil liabilities under the United States federal securities laws may be affected adversely because the Company is organized under the laws of Canada, a number of its officers and directors and some or all of the experts named in this short form prospectus are Canadian residents or otherwise reside outside of the United States, and a substantial portion of the Company’s assets and the assets of such persons are located outside the United States. See “*Enforceability of Civil Liabilities*” in this short form prospectus.**

**THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION (THE “SEC”) OR THE SECURITIES COMMISSION OF ANY STATE OF THE UNITED STATES, NOR HAVE THE FOREGOING PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.**

Each of Charles Federico, a director of the Company, David McNally, President, Chief Executive Officer and a director of the Company and John Schellhorn, a director of the Company, resides outside of Canada (the “Non-Resident Directors”). The Non-Resident Directors have appointed the following agent for service of process:

<u>Name of the Person or Company</u>	<u>Name and Address of Agent</u>
Charles Federico	Titan Medical Inc.
David McNally	170 University Avenue, Suite 1000
John Schellhorn	Toronto, Ontario, Canada
	M5H 3B3

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. See “*Risk Factors*”.

**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*”.**

**In this short form prospectus, unless otherwise specified or the context otherwise requires, all dollar amounts are expressed in United States dollars. All references to “dollar”, “\$” or “US \$” are to United States dollars.**

All references to “CDN \$” are to Canadian dollars. Potential purchasers should be aware that foreign exchange fluctuations are likely to occur from time to time and that the Company does not make any representation with respect to currency values from time to time. Investors should consult their own advisors with respect to the potential risk of currency fluctuations. See “*Currency Presentation and Exchange Rate Information*” in this short form prospectus.

The Company’s head and registered office is located at 170 University Avenue, Suite 1000, 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. Neither the Company nor the Agent has authorized anyone to provide you with different or additional information. Neither the Company nor the Agent is 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.

The Company is subject to the information requirements of the United States Securities Exchange Act of 1934, as amended (the "U.S. Exchange Act"), and applicable Canadian securities legislation, and in accordance therewith files reports and other information with the SEC and with the securities regulators in Canada. Under a MJDS adopted by the United States and Canada, documents and other information that the Company files with the SEC may be prepared in accordance with the disclosure requirements of Canada, which are different from those of the United States. As a foreign private issuer, the Company is exempt from the rules under the U.S. Exchange Act prescribing the filing, delivery and content of proxy statements, and its officers, directors and principal shareholders are exempt from the insider reporting and short-swing profit recovery provisions contained in Section 16 of the U.S. Exchange Act. In addition, the Company may not be required to publish financial statements as promptly as a comparable U.S. company.

### **Additional Information**

You may read any document that the Company has filed with or furnished to the SEC at the SEC's public reference room located at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of any such document from the SEC's public reference room by paying a fee. You should call the SEC at 1-800-SEC-0330 or access its website at [www.sec.gov](http://www.sec.gov) for further information about the public reference room. You may read and download any of the documents the Company has filed with or furnished to the SEC through its Electronic Data Gathering and Retrieval system ("EDGAR") at [www.sec.gov](http://www.sec.gov). You may read and download any public document that the Company has filed with the Canadian securities regulatory authorities at [www.sedar.com](http://www.sedar.com).

The Company has concurrently filed with the SEC under the United States Securities Act of 1933, as amended (the "U.S. Securities Act"), a registration statement on Form F-10, relating to the Units, Offered Shares, Warrants, Warrant Shares, Broker Warrants, Broker Warrant Shares, Over-Allotment Units, Over-Allotment Shares, Over-Allotment Warrants, and Over-Allotment Warrant Shares being offered hereunder and of which this short form prospectus forms a part. This short form prospectus does not contain all of the information set forth in such registration statement, certain items of which are contained in the exhibits to the registration statement as permitted or required by the rules and regulations of the SEC. Items of information omitted from this short form prospectus but contained in the registration statement will be available on the SEC's website at [www.sec.gov](http://www.sec.gov). Statements included in this short form prospectus or the documents incorporated by reference herein about the contents of any contract, agreement or other document referred to are not necessarily complete, and in each instance, prospective investors should refer to the exhibits for a complete description of the matter involved. Each such statement is qualified in its entirety by such reference.

### **Market and Industry Data**

Unless otherwise indicated, information contained in this short form prospectus concerning the Company's industry and the markets in which it plans to operate or seeks to operate, including its general expectations and market position, market opportunities and market share, is based on management studies and estimates, information from independent industry organizations and consultants, and other third-party sources (including industry publications, surveys and forecasts), such as Life Science Intelligence's Meddevicetracker October 2017 report titled "Global Robotically-Assisted Surgical Devices Market", number MDT 17015. These market research reports are subjective and speak as

of their original publication dates (and not as of the date of this short form prospectus) and the opinions and market data expressed in those reports 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. The information presented in the reports noted above and any underlying assumptions for the market estimate and projections contained therein have not been independently verified.

While management believes 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 future performance and the future performance of the industry and markets in which the Company plans to 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 and Trade Names**

This short form prospectus includes references to the Company’s trade-marks and trade names, such as Titan and Titan Medical, some of which may be protected under applicable intellectual property laws of one or more countries and which the Company believes is its property. Solely for convenience, the Company’s trade-marks referred to in this short form prospectus may appear without the <sup>TM</sup> symbol, but such references are not intended to indicate, in any way, its rights in such marks or that the Company will not assert, to the fullest extent under applicable law, its 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.

### **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” and “forward-looking statements”, within the meaning of applicable Canadian and United States securities laws. (collectively herein referred to as “forward-looking statements”). These statements relate to future events or future performance and reflect the Company’s expectations and assumptions regarding the growth, results of operations, performance and business prospects and opportunities of the Company. 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 the Company’s 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 the Company’s 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 human cadaver studies;
- the Company’s expectation with respect to launching a commercial product at some point in the future and the minimum amount of funds the Company expects to need to raise;
- the Company’s expectation that it can in a timely manner, or at all, produce the appropriate preclinical, and if necessary, clinical data required;
- the Company’s intentions to develop a robust training curriculum and post-training assessment tools;

- the Company's plans to develop its robotic 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 its robotic surgical system and the estimated incremental costs (including the status, cost and timing, to the extent disclosed, of achieving the development milestones disclosed herein);
- the Company's intentions to complete summative human factors studies and complete the design and development of the system and initiate 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 robotic surgical system;
- the Company's intention to continue to assess specialized skill and knowledge requirements and recruitment and retention of qualified personnel and partners;
- the Company's intention to pursue the recruitment of surgeons and hospitals for the required studies and to obtain approval from the IRB (as defined herein) of each hospital;
- the Company's belief that the materials and parts necessary for the manufacture of a clinical-grade robotic surgical system will be available in the marketplace;
- 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 expectation that it will be able to finance its continuing operations by accessing public markets for its securities;
- the Company's intended use of proceeds of any offering of its securities;
- 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;
- the projected competitive conditions with respect to the Company's products;
- the estimated size of the market for robotic surgical systems;
- the potential market for the securities issuable under the Offering; and
- over-allotment options or other transactions which would stabilize or maintain the market price of the Company's securities.

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 short form prospectus, including but not limited to those described in the section titled, "*Risk Factors*", in this short form prospectus, in any document incorporated by reference herein. These risks include, but are not limited to:

- Additional Financing and Going Concern
- History of Losses
- Dependence on Key Personnel
- Ability to Attract Qualified Employees to Maintain and Grow Business
- Breach and Loss of Trade Secrets and Other Proprietary Information
- Dependence on Third Parties
- Competition
- Infringement of Intellectual Property Rights
- Intellectual Property – Patents
- Intellectual Property – Trade-marks
- Ability to License Other Intellectual Property Rights
- Current Global Financial Conditions
- 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
- Government Regulation
- Profitability
- Changes in Government Policy
- Changes in Accounting and Tax Rules
- Contingent Liabilities
- Obligations as a Public Company
- The Company Is a “Foreign Private Issuer” Under the U.S. Securities Laws
- The Company May Lose its Status as a Foreign Private Issuer Under the U.S. Securities Laws
- The Company Is an Emerging Growth Company Under the U.S. Securities Laws
- The Company is Probably a PFIC (As Defined Herein)
- Uncertainty as to Product Development Milestones
- Product and Services Not Completely Developed
- Manufacturing Risks
- Reliance on External Suppliers and Development Firms
- Product Defect Risks
- Supplier Risks
- Stock Price Volatility
- Future Share Sales
- Limited Operating History
- Strategic Alliances
- Fluctuating Financial Results
- Effect of Estimates Regarding Milestones
- Currency Fluctuations
- Liquidity of the Common Shares
- Ability of the Company to Maintain Its Stock Exchange Listings

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 milestones;
- inability to achieve product cost targets;
- competition;
- changes to tax rates and benefits;
- the availability of financing on a timely basis;
- 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 robotic surgical system and related platforms and equipment;
- the progress and timing of the development of the Company’s robotic surgical system;
- costs related to the development of the Company’s robotic surgical system;
- receipt of all applicable regulatory approvals/clearances;
- 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;
- the Company’s ability to meet the continued listing standards of Nasdaq and the TSX; and
- the type of specialized skill and knowledge required to develop the Company’s robotic surgical system and the Company’s access to such specialized skill and knowledge.

The Company cautions 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 \$” or \$), unless otherwise indicated. The following table sets out the daily exchange rate of US \$1.00 in terms of Canadian dollars (“CDN \$”).

	<u><b>High (CDN)</b></u>	<u><b>Low (CDN)</b></u>	<u><b>Average (CDN)</b></u>
Fiscal years ended			
December 31, 2018	\$1.3642	\$1.2288	\$1.2957
December 31, 2017	\$1.3743	\$1.2128	\$1.2986

On October 11, 2019, the daily exchange rate for US \$ in terms of CDN \$, as quoted by the Bank of Canada, was US \$1.00 = CDN \$1.3198.

### **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 and with the SEC in the United States. Copies of the documents incorporated by reference herein may be obtained on request without charge from the Chief Financial Officer of the Company at 170 University Avenue, Suite 1000, 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 (“SEDAR”) which can be accessed at [www.sedar.com](http://www.sedar.com). Documents filed with, or furnished to, the SEC are available through EDGAR at [www.sec.gov](http://www.sec.gov), as well as from commercial document retrieval services. You may also read (and by paying a fee, copy) any document the Company files with or furnishes to the SEC at the SEC’s public reference room in Washington, D.C. (100 F Street N.E., Washington, D.C. 20549). Please call the SEC at 1-800-SEC-0330 for more information on the public reference room. 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 (collectively, the “Documents Incorporation by Reference”):

1. the annual information form of the Company dated March 29, 2019 for the financial year ended December 31, 2018 (the “AIF”);
2. the audited financial statements of the Company as at, and for the financial years ended December 31, 2018 and 2017, together with the notes thereto and the independent auditor’s reports thereon (the “Annual Financial Statements”);
3. the management’s discussion and analysis of financial condition and results of operations for the financial year ended December 31, 2018 (the “Annual MD&A”);
4. the unaudited condensed interim financial statements of the Company as at, and for the three and six months ended, June 30, 2019, consisting of the unaudited condensed interim balance sheet of the Company as at June 30, 2019 and the unaudited condensed interim statement of shareholders’ equity and deficit, net and comprehensive loss and cash flows for the three and six months ended June 30, 2019 and 2018, together with the notes thereto (the “Interim Financial Statements”);

5. the management's discussion and analysis of financial condition and results of operations for the three and six months ended June 30, 2019 (the "Interim MD&A");
6. the management information circular dated April 29, 2019 relating to Titan's annual and special meeting of shareholders on May 29, 2019;
7. the material change report of the Company dated March 6, 2019 in respect of the filing of a preliminary short form prospectus and the announcement of pricing details for a previous public offering (the "March Offering");
8. the material change report of the Company dated March 28, 2019 in respect of the filing of a final short form prospectus (the "March Prospectus") and the closing of the March Offering; and
9. the material change report of the Company dated September 3, 2019 in respect of the Aspire Agreement (as defined herein).

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 the Offering, will be deemed to be incorporated by reference into this short form prospectus.

In addition, to the extent that any document or information incorporated by reference into this short form prospectus pursuant to the foregoing paragraph is also included in any report filed with or furnished to the SEC by the Company on Form 6-K or on Form 40-F (or any respective successor form) after the date of this short form prospectus, it shall be deemed to be incorporated by reference as an exhibit to the registration statement of which this short form prospectus forms a part. Further, the Company may incorporate by reference into the registration statement of which this short form prospectus forms a part, any report on Form 6-K furnished to the SEC, including the exhibits thereto, if and to the extent provided in such report.

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 Agent 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.

## **DOCUMENTS FILED AS PART OF THE REGISTRATION STATEMENT**

The following documents have been or will be filed with the SEC as part of the registration statement of which this short form prospectus forms a part: (i) the documents referred to under the heading “*Documents Incorporated by Reference*”; (ii) the Agency Agreement; (iii) the consent of BDO Canada; (iv) the consent of Borden Ladner Gervais LLP; (v) the consent of Baker & McKenzie LLP and (vi) the powers of attorney from certain directors and officers of the Company.

## **THE BUSINESS**

### **Product Development**

The Company’s business is focused on research and development with the intent of commercializing computer-assisted robotic surgical technologies for application in minimally invasive surgery (“MIS”). The Company is developing its single-port robotic surgical system, which 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. The Company intends to initially pursue gynecologic surgical indications for use of its single-port robotic surgical system.

Development of the single-port robotic surgical system has proceeded with input from surgeons and operating room staff experienced in minimally invasive surgery, consultation with medical technology development firms and input from the Company’s Surgeon Advisory Board (the “Surgeon Advisory Board”) comprised of surgeons who specialize in minimally invasive surgery. 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 enhanced instrument dexterity.

The single-port robotic surgical system patient cart is being developed to deliver multi-articulating instruments and a dual-view camera system into a patient’s abdominal body cavity through a single access port. The dual-view camera system consists of a flexible 3D high-definition endoscopic camera along with a light source and a camera insertion tube of approximately 25 millimeter diameter that includes an integrated 2D high-definition camera along with an independent light source that once inserted, provides visualization for optimal positioning of the camera insertion tube by a bedside assistant under the guidance of the surgeon. Once the camera insertion tube is inserted and positioned in the body, it is docked to the central unit of the patient cart and the 3D high-definition endoscopic camera is deployed in a manner that the endoscopic camera and multi-articulating instruments can be controlled by the surgeon via the workstation. The reusable multi-articulating, snake-like instruments are designed to couple with an assortment of permanent and detachable single patient use end effectors that in the case of the latter, provide first use quality in every case and eliminate the reprocessing of the complete instrument. The use of reusable (for a specific number of

uses) robotic instruments that can be cleaned and sterilized between surgeries, and single patient use end effectors is intended to minimize the cost per procedure without compromising surgical performance. 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 ambulatory surgical centers, where applicable.

As part of the development of its single-port robotic surgical system, the Company is developing a robust training curriculum and post-training assessment tools for surgeons and surgical teams. The proposed training curriculum is planned to include cognitive pre-training, psychomotor skills training, surgery simulations, live animal and human cadaver lab training, surgical team training, troubleshooting and an overview of safety. Post-training assessment will include validation of the effectiveness of those assessment tools. On September 18, 2018, the Company announced the successful completion of 14 core surgical skills simulation modules for use with the surgeon workstation. The successful demonstration and delivery of these modules was a significant development in the first phase of the comprehensive surgeon training curriculum that the Company is planning for its single-port robotic surgical system.

The Company continuously evaluates its technologies under development for intellectual property protection through a combination of trade secrets and patent application filings. The Company has expedited the filing and prosecution of patents that management believes will validate the novelty of its unique technology, and in turn, support the value of the entire franchise. Early evidence of success with this initiative has been the rapid growth of its patent portfolio from 12 issued patents at December 31, 2016 to 46 issued patents as of October 15, 2019. The Company anticipates further expanding its patent portfolio by filing additional patent applications as it progresses in the development of robotic surgical technologies and potentially, by licensing suitable technologies.

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

Among other things, the future success of the Company is substantially dependent on funding its research and development program and design for manufacturing, including the ongoing support of outsourced research and development and manufacturing service providers. As of the date of this short form prospectus, the Company's primary product development suppliers have scaled back development of and terminated certain staff members working on the Company's robotic surgical system. See "*Recent Developments*", "*Risk Factors – Additional Financing and Going Concern*" and "*Risk Factors – Reliance on External Suppliers and Development Firms*".

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

During the year ended December 31, 2018, the Company achieved all of its milestones as published in the Company's Annual Information Form for the 2018 fiscal year. The Company generally continued this trend of accomplishment through the six months ended June 30, 2019, having initiated preclinical acute and chronic (survival) live animal and human cadaver procedures according to Good Laboratory Practices ("GLP"). However, human factors evaluation ("HFE") studies that were previously planned for the second quarter of 2019 were moved to the third quarter in order to accommodate the GLP procedures, which from a timing perspective were a priority.

### **Development Objectives**

The Company uses a combination of internal resources and external development firms to execute the research, development and regulatory plans for the development of the Company's single-port robotic surgical system.

The Company has previously confirmed with the FDA that confirmatory human data will be required for its planned 510(k) regulatory submission. The performance of human surgeries with the single-port robotic surgical system will

require an Investigational Device Exemption (“IDE”) from the FDA, which must be submitted and approved in advance. Further, the recruitment of surgeons from multiple hospital sites or ambulatory centers will be necessary to perform the surgeries. Each of these sites will require approval from its independent Institutional Review Board (“IRB”), in order to allow the studies to proceed.

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

*Current Development Plan*

The Company anticipates development costs through the fourth quarter of 2019 to be as set out in the table below.

<i>Milestone Number</i>	<i>Development Milestones</i>	<i>Estimated Cost (in US million \$)</i>	<i>Schedule for Milestone Completion</i>	<i>Comments</i>
Milestone 1	<ul style="list-style-type: none"> <li>a) Prototype, test and procure surgeon feedback on revised workstation controls</li> <li>b) Complete software and hardware change requirements and finalize computer and software architecture for production systems</li> <li>c) Complete revisions to instrument and lens wash system and demonstrate performance</li> </ul>		Q2 2018	Completed
Milestone 2	<ul style="list-style-type: none"> <li>a) Complete Camera Insertion Tube (CIT) engineering confidence build based on improved design</li> <li>b) Complete design of surgeon workstation and patient cart for engineering confidence build</li> <li>c) Complete and demonstrate full suite of simulation software for beta test</li> </ul>		Q3 2018	Completed
Milestone 3	<ul style="list-style-type: none"> <li>a) Complete capital equipment engineering confidence build based on improved design</li> </ul>		Q4 2018	Completed
Milestone 4	<ul style="list-style-type: none"> <li>a) Document results of confidence build unit testing, implement subsystem design improvements and schedule preliminary audit of</li> </ul>		Q1 2019	Completed

<i>Milestone Number</i>	<i>Development Milestones</i>	<i>Estimated Cost (in US million \$)</i>	<i>Schedule for Milestone Completion</i>	<i>Comments</i>
	quality system by European Notified Body			
Milestone 5	a) Update system design and related hardware and software documentation b) Initiate Design Freeze c) Initiate preclinical live animal (swine) and cadaver studies according to final protocols for FDA submittal d) Submit draft protocols to FDA in Q-submission(s) for comment		Q2 2019	Completed  Completed Completed  Completed
Milestone 6	a) Complete and document preclinical live animal (swine) and cadaver studies according to final protocols for FDA submittal b) Verify production system operation with clinical experts under rigorous formal (summative) human factors evaluation under simulated robotic manipulation exercises		Q3 2019	Completed  Completed
	c) Complete audits for ISO 13485 Certification		Q3 2019	Completed
Milestone 7	a) Complete improvements to camera insertion tube and endoscope module and verify performance b) Begin to compile design and verification documentation for application for Investigational Device Exemption (IDE) c) Complete pre-IRB submission preparations for human confirmatory studies, including communications with IRB Committees of hospitals	5.2 <sup>(1)</sup>	Q3 2019	Completed  Complete  Complete
	a) Obtain final independent report			

<sup>(1)</sup> Includes accrued but unpaid research and development costs estimated at approximately US \$4.6 million, and accrued but unpaid general and administrative costs estimated at approximately US \$0.6 million. Other than payment of invoices for work previously performed by its subcontractors, the Company does not anticipate any other cash outflow requirements in order to complete this Milestone.

<i>Milestone Number</i>	<i>Development Milestones</i>	<i>Estimated Cost (in US million \$)</i>	<i>Schedule for Milestone Completion</i>	<i>Comments</i>
Milestone 8 <sup>(2)</sup>	<p>from validation testing of system safety and usability for the intended users and use environments under simulated robotic manipulation exercises intended to replicate essential surgical tasks</p> <p>b) Complete User Manual for robotic system setup by operating room staff and surgeon operation of surgeon workstation, patient cart, instruments and accessories</p> <p>c) Obtain ISO 13485 Certification<sup>(3)</sup></p>	4.1	Q4 2019	
Milestone 9	<p>a) Implement and test improvements to instruments and accessories</p> <p>b) Perform biocompatibility testing of instruments at independent lab</p> <p>c) Perform electrical safety testing for surgeon workstations and patient cart, including electromagnetic compatibility (EMC) and electromagnetic interference (EMI) tests at independent lab</p> <p>d) Update application for IDE as additional testing lab data is received and continue preparations for human confirmatory studies</p>	TBD	TBD	New
Milestone 10	<p>a) Launch rebranded product line, including logos with trade-mark pending, literature and presentation templates, product and packaging labeling, and new website</p> <p>b) Complete system software validation</p> <p>c) Submit IDE application to FDA</p>	TBD	TBD	<p>New</p> <p>New</p> <p>Moved from Q3 2019</p>

<sup>(2)</sup> Milestones 8 constitutes the Company's next significant milestone and includes research and development costs estimated at approximately US \$3.2 million, and general and administrative costs estimated at approximately US \$0.9 million.

<sup>(3)</sup> The March Prospectus disclosed that obtaining ISO 13485 Certification was expected to occur in the third quarter of 2019 and receipt of the certification is now projected for completion in the fourth quarter 2019.

<i>Milestone Number</i>	<i>Development Milestones</i>	<i>Estimated Cost (in US million \$)</i>	<i>Schedule for Milestone Completion</i>	<i>Comments</i>
Milestone 11	a) Receive IDE approval from FDA <sup>(4)</sup> b) Receive approvals from IRB Committees of IDE hospitals c) Commence human confirmatory studies under IDE protocols for FDA submittal	TBD	TBD	Moved from Q3 2019 Moved from Q4 2019 Moved from Q4 2019
Milestone 12	a) Complete human confirmatory studies and patient follow-up and compile reports from human confirmatory studies b) Submit 510(k) application to FDA c) Submit Technical File to European Notified Body for review for CE Mark d) Ongoing software development and implementation e) Planning and preparation for manufacturing and commercialization	TBD	TBD	Moved from Q4 2019 Moved from Q4 2019 Moved from Q4 2019 Moved from Q1 2020 Moved from Q1 2020
Milestone 13	a) Planning and preparation for commercialization	TBD	TBD	Moved from Q2 2020

The details above with respect to Milestones 10, 11, 12 and 13 reflect the Company's current expectations with respect to the development steps for its robotic surgical system. However, the Company is unable to provide any forecast, and, concurrently with the filing of this short form prospectus, has issued a press release withdrawing all prior forecasts (including those set forth in the Documents Incorporated by Reference), as to the timing for completion of these milestones or their estimated costs at this time. See "Special Note Regarding Forward-Looking Statements", "Recent Developments" and "Risk Factors".

Having regard to the foregoing and contingent on the availability of sufficient financing allowing the Company to advance the development of its robotic surgical system in a timely and cost-effective manner as well as normalizing supplier relationships and resumption of normal course operations, and the absence of unanticipated product development and verification difficulties, the Company estimates that it will need to raise, in addition to the proceeds from the Maximum Offering, approximately US \$70.0 million in order to be in a position to file its 510(k) application with the FDA in 2021. The increase in time and costs over prior estimates relates to a reduction in the Company's pace of product development due to limited financial resources, which has moved out the projected date by more than six months and added to the estimated costs for the Company's submission of its 510(k) application.

<sup>(4)</sup> The March Prospectus disclosed that receipt of IDE approval from the FDA was expected to occur in the third quarter of 2019. However, the Company has withdrawn the projections for achievement of all development milestones beyond Milestone 8, including their timing and cost.

During the third quarter of 2019, the Company completed Milestone 6, including the animal studies and the human factors evaluation studies originally planned for completion during the second quarter of 2019. However, as data from the animal studies and human factors studies was delayed, followed by delays in receiving documentation required from third parties, there will be a corresponding delay in the Company's planned IDE application to the FDA. In addition, the animal studies and human factors studies have revealed additional product enhancements that the Company intends to implement before proceeding to human use. The pace of implementation of product enhancements and the production of documentation for the Company's IDE application are paced by the availability of capital resources, which absent the proceeds of the Offering, are not available. As a result of these factors, the submission of the IDE application to the FDA (Milestone 10) cannot be predicted at this time. Although audits for ISO13485 were completed as planned during the third quarter (Milestone 6), the issuance of the ISO13485 certificate is expected to occur during the fourth quarter (Milestone 8), due to required follow-up documentation and the review process of the Company's Notified Body.

The table below sets out certain details comparing the Company's development plan and expected costs as disclosed in the March Prospectus against its current development plan and actual costs as disclosed herein:

<i>Development milestone as disclosed in March Prospectus</i>	<i>Estimated cost (in US million \$) as disclosed in March Prospectus</i>	<i>Development milestone as disclosed in this prospectus</i>	<i>Actual Cost</i>	<i>Difference between estimated cost disclosed in March Prospectus and actual cost</i>	<i>Reasons for Cost Difference</i>
	(A)		(B)	(A-B)	
<p><b><u>Milestone 4</u></b></p> <p>Document results of confidence build unit testing, implement subsystem design improvements and schedule preliminary audit of quality system by European Notified Body</p>	16.0	<p><b><u>Milestone 4</u></b></p> <p>Document results of confidence build unit testing, implement subsystem design improvements and schedule preliminary audit of quality system by European Notified Body</p>	16.1	0.63% increase	Actual costs exceeded estimated costs due to minor variances.
<p><b><u>Milestone 5</u></b></p> <p>Update system design and related hardware and software documentation</p>	16.9	<p><b><u>Milestone 5</u></b></p> <p>Update system design and related hardware and software documentation</p>	21.0	24.26% increase	
<p>Verify production system operation with clinical experts under rigorous formal</p>		<p>Moved to Milestone 6</p>			

<i>Development milestone as disclosed in March Prospectus</i>	<i>Estimated cost (in US million \$) as disclosed in March Prospectus</i>  (A)	<i>Development milestone as disclosed in this prospectus</i>	<i>Actual Cost</i>  (B)	<i>Difference between estimated cost disclosed in March Prospectus and actual cost</i>  (A-B)	<i>Reasons for Cost Difference</i>
(summative) human factors evaluation under simulated robotic manipulation exercises					Actual costs exceeded estimated costs due to unanticipated robotic system software issues and design changes related to consumable instruments and improved camera systems that interface with the robotic system and led to delays in the preparation of documentation for the IDE application. These issues also caused delay in the completion of the human factors evaluation that was completed in the third quarter of 2019 rather than as scheduled in the second quarter of 2019.
Implement SPORT Surgical System Design Freeze (5)		Initiate Design Freeze			
Initiate preclinical live animal (swine) and cadaver studies according to final protocols for FDA submittal (5)		Initiate preclinical live animal (swine) and cadaver studies according to final protocols for FDA submittal			
Submit Investigational Device Exemption (IDE) application to FDA		Moved to Milestone 8			
Submit draft protocols to FDA in Q-submission(s) for comment		Submit draft protocols to FDA in Q-submission(s) for comment			
<b><u>Milestone 6</u></b>  Complete and document preclinical live animal (swine) and cadaver surgery studies according to final protocols for FDA submittal	16.1	<b><u>Milestone 6</u></b>  Complete and document preclinical live animal (swine) and cadaver surgery studies according to final protocols for FDA submittal	13.1	18.63% decrease	

<i>Development milestone as disclosed in March Prospectus</i>	<i>Estimated cost (in US million \$) as disclosed in March Prospectus</i>  (A)	<i>Development milestone as disclosed in this prospectus</i>	<i>Actual Cost</i>  (B)	<i>Difference between estimated cost disclosed in March Prospectus and actual cost</i>  (A-B)	<i>Reasons for Cost Difference</i>
					Actual costs were less than estimated costs as not all steps were completed in the planned timeframe, with certain steps being deferred to Milestone 9 and beyond, including receipt of ISO 13485 Certification and IDE approval. The cause for this delay is the unanticipated robotic system software issues and design changes related to consumable instruments and improved camera systems that interface with the robotic system.
Obtain ISO 13485 Certification		Moved to Milestone 9			
		Complete audits for ISO 13485 Certification			
Receive IDE approval from FDA		Moved to Milestone 9			
		Verify production system operation with clinical experts under rigorous formal (summative) human factors evaluation under simulated robotic manipulation exercises			

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 in the course of the development of its robotic surgical system, and existing milestones, budgets and the schedule for completion of each milestone may change depending on a number of factors including the results of the Company’s development program, clarification of or changes to regulatory requirements, the availability of financing and the ability of development firms engaged by the Company to complete work assigned to them. The total costs to complete the development of the Company’s robotic surgical system cannot be estimated at this time based on current information available to the Company. Please see “*Special Note Regarding Forward-Looking Statements*” and “*Risk Factors*”.

Please also refer to the risk factors set forth starting on page 16 of the AIF.

### **Market Opportunity**

The Company’s robotic surgical system is being designed to address the growing global robotically-assisted surgical

devices market.

The size of the global market for *robotically-assisted surgical devices* is projected by Life Science Intelligence Inc.'s Meddevicetracker to be \$5.3 billion by 2021, based on an October 2017 report titled "Global Robotically-Assisted Surgical Devices Market", number MDT 17015 (the "Meddevicetracker Report"). The Meddevicetracker Report focuses only on *robotically-assisted surgical devices* and uses actual 2016 data of \$3.04 billion in global revenue as the baseline. The Meddevicetracker Report then applies a compound annual growth rate of 11.7% to project global revenue for the next five years.

The above-referenced market research reports are subjective and speak as of their original publication dates (and not as of the date of this short form prospectus), and the opinions and market data expressed in the reports are subject to change without notice. Management believes that these sources are generally reliable, but the accuracy and completeness of the meaning of information presented in the reports is not guaranteed. The information presented in the reports noted above and any underlying assumptions for the markets estimate and the projections contained therein have not been independently verified.

According to a press release issued by robotic surgery industry leader Intuitive Surgical on January 9, 2019, over 1,000,000 surgical procedures were performed with the da Vinci Surgical System in 2018, an increase of approximately 18% compared with approximately 877,000 procedures performed in 2017, with further procedure growth of 13% to 17% projected for 2019. Intuitive Surgical reported that it shipped 926 *da Vinci* Surgical Systems in 2018, compared with 684 systems in 2017. The information set forth in the news release of Intuitive Surgical noted above has not been independently verified by the Company.

#### *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, 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 robotics 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 MIS 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, catheter-based interventional cardiology and radiology, and endoscopic, diagnostic and therapeutic bronchoscopic procedures.

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 entrenched industry leader within the robotic surgical market is Intuitive Surgical, Inc., manufacturer of several models of the da Vinci® Surgical System. Having entered the market in 1999, Intuitive Surgical's product line now includes multiple generations of da Vinci multi-port robotic systems, as well as a new single-port da Vinci SP® model cleared by the FDA for urologic and trans-oral applications, with customer shipments that began in the third quarter of 2018. Specifically related to abdominal surgery, a new competitor in multi-port robotic surgery has emerged, with TransEnterix Inc. receiving FDA clearance for its Senhance™ Surgical Robotic System in October of 2017. In addition, Medrobotics Corporation has received FDA clearance for abdominal indications for its Flex® Robotic System with manual endoscopic instruments, which had previously been cleared for natural orifice (ENT) surgery. In 2019, Ethicon, Inc. (a division of Johnson & Johnson) acquired Auris Health, Inc., the maker of the Monarch™ surgical platform, for approximately US \$5.75 billion (including contingent payments). Further, there are a number of companies reported to be developing robotically-assisted surgical systems, including Medtronic, Inc., Verb Surgical Inc. (a collaboration between Alphabet Inc.'s Verily division (formerly, Google Life Sciences) and Ethicon, Inc., CMR Surgical Ltd. from the United Kingdom (Versius® surgical robotic system) and South Korea's Meere Company Inc. (Eterne 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.

In preparation for its planned FDA 510(k) application, the Company has already filed several Q-Submissions with the FDA to clarify in detail the preclinical studies and confirmatory human data required to support its submission.

Even 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 under the ISO 13485:2003 standard. Any modifications of existing products or development of new products in the future will require permission to affix the CE Mark to such products. During the third quarter of 2019 the Company successfully completed audits by a European Notified Body for ISO 13485:2003. Certification of its quality system and certification of ISO 15485:2003 status is expected during the fourth quarter of 2019.

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. The Company believes the required skill and knowledge to carry out Milestone 8 of its research and development program is available to the Company, through its current officers and employees and external medical technology development firms. However, the Company will need to continue to assess its requirements and recruit and engage required qualified personnel and development firms as needed, subject to budget limitations and the timely availability of financing.

### **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 may license third party technologies to provide the Company with the flexibility to adopt preferred technologies.

As of October 15, 2019, the Company has ownership of 46 patents and 83 patent applications.

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.

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. The Company may not have the financial resources required to defend against such claims.

Although the Company has registrations and pending applications for certain trade-marks, it may be unable to obtain or maintain trade-mark registrations for the marks and names it uses in one or more countries. It is also possible that the use of "Titan", "Titan Medical" or variations thereof may infringe or contravene the rights, including trade-mark 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. See "*Recent Developments – Relationships with Key Suppliers*" and "*Risk Factors – Reliance on External Suppliers and Development Firms*".

The Company maintains its head office at subleased premises in Toronto, Ontario, Canada and during the third quarter of 2019, entered into a lease for premises in Chapel Hill, North Carolina, USA.

### **Employees**

As of October 15, 2019, the Company had a total of eleven full-time employees.

## RECENT DEVELOPMENTS

### *Relationships With Suppliers*

On October 3, 2019, the Company and its primary product development supplier entered into a letter agreement providing that until the Company has secured sufficient financing, the requirement that the Company maintain a deposit with the supplier would be waived. Instead, the Company would pre-pay for development work in advance of each month during which product development services are to be provided. Consequently, US \$2.0 million which had been paid to the primary product development supplier and held as a deposit under the original contract will be applied toward the Company's payables for past services rendered by the primary product development supplier. Once the Company has sufficient cash on hand to fund a deposit equal to three months of projected invoices from the supplier, the Company would maintain a deposit in that amount for the six-month period ending April 3, 2020, after which deposit terms will revert to the terms of the original agreement.

Pursuant to the original agreement, the amount of the Company's deposit with its primary product development supplier is based on forecasted invoices with the supplier and the Company's cash position on a monthly basis. Under its original contractual commitment with its primary product development supplier, and provided that the Company has sufficient financial resources to finance 12 months of operations, no deposit is required. If the Company has financial resources sufficient to finance operations for 6-12 months, then an amount equivalent to the projected amount of the next month's invoice from the supplier is required as the deposit. If the Company has financial resources that would fund less than six months of operations, then a deposit equal to two months of projected invoices from the supplier is required.

In consultation with the Company, the primary product development supplier decided on October 3, 2019 to limit the development work that the supplier performs for the Company and has terminated the employment or engagement of a significant number of the employees and contractors who had been working with the supplier on the development of the Company's robotic surgical system. This will significantly impact the timing and costs associated with the completion of the Company's future milestones as additional time and cost will be incurred to rehire employees and resume product development.

In recent weeks, the Company's relationships with another service provider has deteriorated as the service provider, on the one hand, has noted concerns about the Company's inability to fully pay invoices while the Company, on the other hand, has expressed dissatisfaction with the quality of the work performed by the service provider. The service provider had been engaged by the Company to develop devices associated with the Company's robotic surgical system. Discussions were under way between the parties to negotiate appropriate arrangements with regard to the scope of work, timing, fees for services and other terms and conditions. On October 4, 2019, the Company received a demand letter from attorneys engaged by the service provider demanding payment for all amounts the service provider believes it is owed by the Company, being US \$2,902,916 (the "Service Provider Demand Letter"). On October 11, 2019, the Company issued a response letter to the Service Provider Demand Letter declining the terms of the demands made out in the Service Provider Demand Letter (the "Company Response Letter"). Pursuant to the Company Response Letter, Titan has requested that the service provider cease all work on behalf of the Company. There is no assurance that the Company will be successful in reaching agreements with the service provider on terms satisfactory to the Company. See "*Risk Factors – Additional Financing and Going Concern*" and "*Risk Factors – Reliance on External Suppliers and Development Firms*".

### *Withdrawal of Previously Published Milestones*

Concurrent with the filing of this short form prospectus, the Company issued a press release disclosing that it was withdrawing all forward-looking statements included in the Documents Incorporated by Reference with respect to the cost and timing of the development of its robotic surgical system beyond the fourth quarter of 2019.

### *Going Concern*

As at September 30, 2019, the Company has shareholders' deficit of approximately \$218.6 million including losses for the nine months ended September 30, 2019 of approximately \$45.7 million. The Company currently does not generate any revenue (other than interest income on its cash balances) and accordingly it is primarily dependent upon

equity financing for any additional funding required for development and operating expenses. These conditions indicate the existence of a material uncertainty that may cast significant doubt on the ability of the Company to continue as a going concern if additional funding is not secured.

#### *Evolution of Costs and Timelines*

During the third quarter of 2019, the Company continued software development, proceeded with HFE studies required for supporting regulatory filings and completed its planned GLP and initial HFE studies. During the remainder of the third and fourth quarters of 2019, the Company plans to compile the reports associated with GLP and initial HFE studies along with design and software validation documentation. The submittal of the IDE application had previously been planned for the third quarter of 2019, however, the Company has since determined that more time will be required to implement design changes to planned system and sterile instrument interface components, software enhancements and training tools, and then produce more complete design and software validation documentation.

The Company is unable to provide any estimates for the cost and timing of development for any period after Milestone 8, which is the Company's next material milestone. The Company will need to undertake successive rounds of fundraising to fund its operations in future periods. Given the uncertainty of, among other things, product development timelines, regulatory processes and requirements (such as confirmatory human studies), the extent of cooperation and support from third party developers as well as the availability of required capital to fund all future development, operating costs, actual costs and development times may exceed management's current expectations and an accurate estimate of the future costs of the regulatory phases and development milestones beyond the fourth quarter of 2019 is not possible at this time. See "*Risk Factors*".

#### *Early Results of First Preclinical Studies*

The Company has previously selected three Centers of Excellence (strategic facilities) for preclinical studies in the U.S. and Europe:

- Florida Hospital Nicholson Center in Celebration, Florida;
- Columbia University Medical Center in New York, New York; and
- Institut Hospitalo-Universitaire de Strasbourg ("IHU Strasbourg") in Strasbourg, France.

Ahead of its published milestone, on September 25, 2017, the Company announced the completion of the world's first gynecologic, colorectal and urologic single port robotic procedures using its advanced prototype robotic surgical system at the Florida Hospital Nicholson Center in Celebration, Florida. Since that time, the Company has announced that surgeons have completed critical surgical tasks integral to gynecologic procedures using advanced prototypes of its robotic surgical system at Columbia University Medical Center's surgical simulation center in New York, New York and at the Institute of Image-Guided Surgery at IHU Strasbourg.

In June 2019, the Company commenced preclinical live animal and cadaver studies according to GLP for FDA submittal. On July 18, 2019 the Company announced that it had completed all planned GLP surgical procedures necessary for its IDE application to the FDA. The GLP studies consisted of simple hysterectomies performed in 10 live animals and 5 human cadavers.

Including the 15 recently performed GLP studies, to date, 12 experienced robotic surgeons from three continents have performed 53 live animal studies and seven human cadaver studies. The studies performed include a broad array of procedures commonly performed by gynecologic, urologic, colorectal, bariatric, and general surgeons. The surgeons who performed these studies have prepared and submitted related abstracts for peer review, and have presented at clinical education meetings. One manuscript describing the results reported from four of those surgeons was published in January of 2019 in a peer-reviewed journal, *Surgical Endoscopy*. Procedures performed in preclinical studies prior to the GLP studies are listed as follows:

- GYN and GYN-ONC (8 procedures at Columbia University and Florida Hospital):
  - Radical Hysterectomy with Bilateral Salpingo Oophorectomy and Bilateral Pelvic / Para-Aortic Node Dissection
  - Simple Hysterectomy with Bilateral Salpingo Oophorectomy and Bilateral Pelvic Node Dissection
  - Simple Hysterectomy with Bilateral Salpingo Oophorectomy
- Urology (19 procedures at IHU Strasbourg and Florida Hospital):
  - Hemi-Nephrectomy and Partial Nephrectomy
  - Prostatectomy (Human Cadaver)
  - Pyeloplasty
  - Ureteral-Bladder Anastomosis
- General Surgery (14 procedures at IHU Strasbourg and Florida Hospital):
  - Cholecystectomy (1 Human Cadaver, 5 Live Porcine)
  - Nissen Fundoplication (1 Human Cadaver, 3 Live Porcine)
  - Esophagectomy (Human Cadaver)
  - Gastrectomy
  - Splenectomy
- Colorectal (4 procedures at Florida Hospital):
  - Colectomy
  - Low Anterior Resection

### Stock Options

On February 12, 2019, the Board of Directors passed a resolution to seek approval from shareholders of the Company at the next annual and special meeting of shareholders (the “AGM”) in order to reprice all outstanding stock options granted to current officers and employees of the Company so that the exercise price would become the greater of: (i) the 5-day volume weighted average price of the Common Shares on the day prior to the date of the AGM and (ii) the Offering Price under the March Offering. On May 29, 2019, the shareholders approved the amendments.

### Aspire Transaction

On August 29, 2019, the Company entered into a common share purchase agreement (the “Aspire Agreement”) with Aspire Capital Fund, LLC (“Aspire”) whereby Aspire committed to purchase up to US \$35 million of Common Shares of Titan at Titan’s request from time to time, until February 28, 2022 (the “Aspire Transaction”). On commencement of the Aspire Agreement, Titan immediately sold to Aspire 1,777,325 Common Shares, representing 5.3% of the Common Shares then issued and outstanding, at a price of US \$1.6879 per Common Share for gross proceeds of US \$3.0 million and 639,837 Common Shares, representing 1.9% of the Common Shares then issued and outstanding, at a price of US \$1.99 as consideration for entering into the Aspire Agreement. There is no assurance that any further financing will be available under the Aspire Agreement. See “*Plan of Distribution*”.

### PRICE RANGE AND TRADING VOLUME 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 Nasdaq in the United States under the symbol “TMDI”. In addition, the Company has four classes of warrants which were, over the last 12 months, listed on the TSX under the symbols TMD.WT.F, TMD.WT.G, TMD.WT.H and TMD.WT.I.

The Company consolidated its outstanding Common Shares on the basis of one post-consolidation Common Share for 30 pre-consolidation Common Shares (the “Share Consolidation”) effective June 19, 2018. Details regarding price and volume before this date are on a pre-Share Consolidation basis and details regarding price and volume after this date are on a post-Share Consolidation basis.

### Summary of Monthly Trading – Common Shares

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

Month	TSX			Nasdaq		
	High (CDN \$)	Low (CDN \$)	Volume	High (US \$)	Low (US \$)	Volume
<b>2018</b>						
October	2.95	2.47	279,330	2.27	1.90	1,397,121
November	3.00	2.30	182,390	2.03	1.80	1,018,750
December	2.59	1.44	128,319	1.98	1.05	1,768,093
<b>2019</b>						
January	6.20	1.62	4,738,600	4.65	1.19	15,319,904
February	6.17	4.37	3,060,410	4.65	3.34	8,828,793
March	5.77	3.70	3,653,910	4.5	2.76	7,788,646
April	4.21	2.83	2,047,860	3.14	2.12	5,874,154
May	3.99	3.16	1,171,230	2.99	2.4	3,371,969

Month	TSX			Nasdaq		
	High (CDN \$)	Low (CDN \$)	Volume	High (US \$)	Low (US \$)	Volume
June	3.54	2.80	750,030	2.64	2.11	2,549,772
July	3.18	2.51	421,000	2.50	1.9	1,905,157
August	3.50	2.40	1,073,320	2.71	1.65	4,711,651
September	3.00	1.3	2,506,580	2.29	0.89	7,963,834
October 1-11	1.55	1.19	3,122,030	1.23	0.93	5,315,669

**Notes:**

(1) The Common Shares commenced trading on Nasdaq on June 27, 2018.

**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 0.03333 Common Share at an exercise price of CDN \$1.60, as adjusted in accordance with the Share Consolidation (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 of the last 12 months (as reported by the TSX).

Month	High (CDN \$)	Low (CDN \$)	Volume
<b>2018</b>			
October	0.02	0.01	43,000
November	0.02	0.015	37,000
December	0.01	0.01	1,000
<b>2019</b>			
January	0.015	0.015	71,500
February	0.02	0.015	51,602
March	-	-	-
April	0.01	0.005	53,250
May	-	-	-
June	-	-	-
July	-	-	-
August	0.01	0.01	1,000
September	0.005	0.005	4,000
October 1-11	0.005	0.005	115,000

**Summary of Monthly Trading – February 2021 Warrants**

Titan issued 11,670,818 warrants on February 12, 2016 and 1,746,789 warrants on February 23, 2016, each exercisable for 0.03333 Common Shares at an exercise price of CDN \$1.00, per warrant, as adjusted in accordance with the Share Consolidation, until February 12, 2021 (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 of the last 12 months (as reported by the TSX).

Month	High (CDN \$)	Low (CDN \$)	Volume
<b><u>2018</u></b>			
October	0.02	0.005	232,500
November	0.025	0.005	374,000
December	-	-	-
<b><u>2019</u></b>			
January	-	-	-
February	0.07	0.045	187,150
March	0.065	0.02	140,600
April	0.055	0.03	28,000
May	0.065	0.05	116,000
June	-	-	-
July	0.03	0.03	17,000
August	0.045	0.045	10,000
September	0.055	0.03	30,000
October 1-11	0.04	0.04	35,700

#### 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 0.03333 Common Shares at an exercise price of CDN \$1.20 per warrant, as adjusted in accordance with the Share Consolidation, until March 31, 2021 (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 of the last 12 months (as reported by the TSX).

Month	High (CDN \$)	Low (CDN \$)	Volume
<b><u>2018</u></b>			
October	0.015	0.005	438,700
November	0.025	0.01	186,000
December	-	-	-
<b><u>2019</u></b>			
January	0.045	0.015	176,000
February	0.04	0.02	389,000
March	-	-	-
April	0.03	0.0197	320,000
May	0.04	0.04	50,000
June	-	-	-
July	-	-	-
August	0.015	0.0095	100,000
September	0.005	0.005	30,000

Month	High (CDN \$)	Low (CDN \$)	Volume
October 1 - 11	-	-	-

#### 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 0.03333 Common Shares at an exercise price of CDN \$0.75 per warrant, as adjusted in accordance with the Share Consolidation, until September 20, 2021 (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 of the last 12 months (as reported by the TSX).

Month	High (CDN \$)	Low (CDN \$)	Volume
<b><u>2018</u></b>			
October	0.08	0.04	113,460
November	0.075	0.025	19,000
December	0.02	0.02	1,000
<b><u>2019</u></b>			
January	0.17	0.05	381,890
February	0.155	0.075	748,413
March	0.12	0.11	355,000
April	0.105	0.06	348,950
May	0.105	0.07	213,000
June	0.115	0.08	276,100
July	0.10	0.03	21,000
August	0.115	0.085	152,500
September	0.10	0.08	50,500
October 1 - 11	-	-	-

#### 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.

The Share Consolidation was effective June 19, 2018. Details regarding price and number of securities granted and issued before this date are on a post-Share Consolidation basis.

Common Shares issued:

<u>Date</u>	<u>Price Per Common Share</u>	<u>Number of Common Shares Issued</u>
January 23, 2019	US \$3.20	68,316 <sup>(1)</sup>

<u>Date</u>	<u>Price Per Common Share</u>	<u>Number of Common Shares Issued</u>
January 24, 2019	US \$3.20	248,574 <sup>(1)</sup>
January 25, 2019	US \$3.20	30,000 <sup>(1)</sup>
January 28, 2019	US \$3.20	71,700 <sup>(1)</sup>
January 29, 2019	US \$3.20	20,500 <sup>(1)</sup>
February 1, 2019	US \$3.20	25,000 <sup>(1)</sup>
February 4, 2019	US \$3.20	151,516 <sup>(1)</sup>
February 8, 2019	US \$3.20	4,000 <sup>(1)</sup>
February 19, 2019	US \$3.20	139,800 <sup>(1)</sup>
February 20, 2019	US \$3.20	35,000 <sup>(1)</sup>
March 4, 2019	US \$3.20	75,000 <sup>(1)</sup>
March 5, 2019	US \$3.20	49,100 <sup>(1)</sup>
March 7, 2019	US \$3.20	100,000 <sup>(1)</sup>
March 21, 2019	US \$3.40	8,455,882 <sup>(2)</sup>
August 30, 2019	US \$1.99	639,837 <sup>(3)</sup>
August 30, 2019	US \$1.69	1,777,325 <sup>(3)</sup>

**Notes:**

- (1) Issued pursuant to the exercise of warrants originally issued August 10, 2018
- (2) Issued pursuant to a short form prospectus of the Company dated March 18, 2019
- (3) Issued pursuant to a Common Share Purchase Agreement dated August 29, 2019

Warrants issued:

<u>Date</u>	<u>Exercise Price per Common Shares</u>	<u>Number of Common Shares Exercisable</u>
March 21, 2019	US \$4.00	8,455,882 <sup>(1)</sup>

**Notes:**

- (1) Issued pursuant to a short form prospectus of the Company dated March 18, 2018.

Stock options issued:

<u>Date</u>	<u>Exercise Price</u>	<u>Number of Stock Options Granted</u>
December 18, 2018	US \$1.55	50,349
February 14, 2019	US \$3.72	40,000
May 29, 2019	US \$3.40	253,000
June 28, 2019	CDN \$4.54	10,000
July 18, 2019	CDN \$4.54	25,719
July 19, 2019	US \$2.20	469,420
July 19, 2019	US \$3.40	41,273
September 9, 2019	US \$3.72	40,000

## DESCRIPTION OF OFFERED SECURITIES

The Offering consists of a minimum of [●] Units and a maximum of [●] Units (assuming no exercise of Over-Allotment Option), each Unit consisting of one Offered Share and one Warrant, each Warrant entitling the holder thereof to purchase one Warrant Share at an exercise price of US \$[●] per Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the date that is [●] months after the first Closing Date. The Units will immediately separate into Offered Shares and Warrants upon issuance. This short form prospectus also qualifies the distribution of Warrant Shares and Broker Warrant Shares.

## Offered Shares

The authorized capital of the Company consists of an unlimited number of Common Shares.

The holders of Common Shares (including Offered Shares, Warrant Shares and Broker Warrant 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 in Canada and by DTC in the United States, except in limited circumstances. See "*Description of Offered Securities - Book-Based System*".

As at October 15, 2019, the Company had 33,567,399 Common Shares issued and outstanding. As at October 15, 2019 after giving effect to the Minimum Offering, the Company would have [●] Common Shares issued and outstanding (without giving effect to the Over-Allotment Option). As at October 15, 2019 after giving effect to the Maximum Offering, the Company would have [●] Common Shares issued and outstanding ([●] Common Shares if the Over-Allotment Option is exercised in full for Over-Allotment Units, assuming no further exercises or issuances of convertible securities).

## Warrants

The Warrants will be governed by the terms of a warrant indenture (the "Warrant Indenture") to be entered into 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 Indenture 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 Indenture.

Each Warrant will entitle the holder to purchase one Warrant Share at an exercise price of US \$[●] per Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the Warrant Expiry Time.

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

The Warrant Indenture 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 Indenture, 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 Indenture, 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 Indenture 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.

The Warrant Indenture will also provide for ratchet anti-dilution protection upon the issuance of Common Shares, securities convertible into Common Shares or certain other issuances at a price below the then-existing exercise price of the Warrants, with certain exceptions and subject to a floor of US \$[●], being the five-day volume weighted average price of Common Shares on the TSX on October [●], 2019.

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 Indenture 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, at any time while the Warrants are outstanding, the Company undergoes a Fundamental Transaction (as defined in the Warrant Indenture) then the holder is entitled to receive, upon exercise of the Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Common Shares then issuable upon exercise of the Warrant, and any additional consideration payable as part of the Fundamental Transaction. Any successor to the Company or surviving entity is obligated to assume the obligations under the Warrant Indenture.

Holders of the Warrants are entitled to a “cashless exercise” option if, at any time of exercise, there is no effective registration statement registering, or no current prospectus available for, the issuance or resale of the Common Shares underlying the Warrants. The “cashless exercise” option entitles the holders of the Warrants to elect to receive fewer Common Shares without paying the cash exercise price. The number of shares to be issued would be determined by a formula based on the total number of shares with respect to which the Warrant is being exercised, the market price per Common Share at the time of exercise and the applicable exercise price of the Warrants issued in the Offering.

The Company will provide certain compensation to a holder if it fails to deliver the Common Shares underlying the Warrants by the first trading day after the date on which delivery of the stock certificate is required by the Warrant Indenture. Compensation may be available in certain circumstances if after the first trading day on which delivery of the Common Shares is required by the Warrant, the holder purchases (in an open market transaction or otherwise)

Common Shares to deliver in satisfaction of a sale by the holder of the Warrant Shares that the holder anticipated receiving upon exercise of the Warrant.

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.

From time to time, the Company (when properly authorized) and the Warrant Agent, subject to the provisions of the Warrant Indenture, may amend or supplement the Warrant Indenture for certain purposes. Certain amendments or supplements to the Warrant Indenture may only be made by “extraordinary resolution”, which is defined in the Warrant Indenture 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 66 $\frac{2}{3}$ % 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 66 $\frac{2}{3}$ % 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. 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 unless specifically requested or required.

The Company and the 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 may 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 since June 30, 2019, the last day of the Company’s most recently completed fiscal period in respect of which financial statements have been filed, after giving effect to the Minimum Offering and the Maximum Offering. The following table should be read in conjunction with the Annual Financial Statements and the Annual MD&A incorporated by reference in this short

form prospectus.

Description of Capital	Outstanding as at June 30, 2019 (US \$)	Outstanding as at June 30, 2019 after giving effect to the Aspire Transaction (US \$)	Outstanding as at June 30, 2019 after giving effect to the Aspire Transaction and the Minimum Offering (US \$) <sup>(1)</sup>	Outstanding as at June 30, 2019 after giving effect to the Aspire Transaction and the Maximum Offering (US \$) <sup>(1)</sup>
Share Capital	\$189,723,070 (31,150,237 Common Shares)	\$192,312,901 (33,567,399 Common Shares)	\$[●] ([●] Common Shares)	\$[●] ([●] Common Shares)
Warrants	\$27,307,700 (21,203,411 Warrants <sup>(3)</sup> )	\$27,307,700 (21,203,411 Warrants)	\$[●] ([●] Warrants <sup>(3)</sup> )	\$[●] ([●] Warrants <sup>(3)</sup> )
Contributed Surplus	\$7,643,817	\$7,643,817	\$[●]	\$[●]
Common Shares Underlying Stock Options	1,187,037 Common Shares	1,187,037 Common Shares	1,187,037 Common Shares	1,187,037 Common Shares

**Notes:**

- (1) Does not include the issuance or exercise of any options, warrants and broker warrants since June 30, 2019. For details of the share issuances in connection with such exercises, please see “*Prior Sales*” in this short form prospectus.
- (2) Assuming no exercise of the Over-Allotment Option and 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, 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, there would be issued and outstanding [●] Common Shares.
- (3) Assuming no exercise of the Over-Allotment Option and excludes broker warrants issued by the Company. As at October 15, 2019, the Company had issued and outstanding 1,328,089 broker warrants and it 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. This assumes no current holder of a broker warrant exercises any or all of such securities.

## USE OF PROCEEDS

### Proceeds and Funds Available

The Company intends to use the net proceeds from the Offering to continue development of its robotic surgical system.

For the six months ended June 30, 2019, cash used in operating activities by the Company was US \$32.3 million, and the Company had a net loss of US \$42.8 million. For the nine months ended September 30, 2018, cash used in operating activities by the Company was approximately US \$43.9 million and the Company had a net loss of US \$45.7 million. At September 30, 2019, the Company had an estimated US \$3.5 million in cash and cash deposits with suppliers, being US \$1.2 million in cash and US \$2.3 million in cash deposits with suppliers, and accounts payable and accrued liabilities of US \$12.1 million excluding warrant liability and the Company had estimated working capital deficit of approximately US \$7.9 million excluding warrant liability. The Company excludes the warrant liability from its working capital presentation as this liability will not be settled through a future cash payment.

The Company estimated that the costs to complete Milestone 7 in the third quarter of 2019 were approximately US\$5.2 million. This estimated capital requirement, as well as the payment of liabilities outstanding, will be satisfied using the net funds raised pursuant to this Offering. The net proceeds of the Minimum Offering will be used to satisfy the outstanding accounts payable related to the costs of Milestone 6 and 7, complete Milestone 8 and provide working capital. If the Maximum Offering is completed and the Over-Allotment Option is exercised in full, the net proceeds will be used to satisfy the outstanding accounts payable related to the costs of Milestone 6 and 7, complete Milestone 8 and fund work toward Milestone 9, and satisfy working capital.

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

	<u>Approximate Proceeds from the Minimum Offering</u>	<u>Approximate Proceeds from the Maximum Offering</u>
Milestone 6 (Residual Payables) <sup>(1)</sup>	US \$3.3 million	US \$3.3 million
Milestone 7 (Residual Payables) <sup>(2)</sup>	US \$5.2 million	US \$5.2 million
Milestone 8 (Forecast)	US \$4.1 million	US \$4.1 million
Milestone 9 (Forecast)	-	US \$3.9 million
Working Capital <sup>(3)</sup>	US \$0.9 million	US \$6.0 million
Total Net Proceeds <sup>(4)</sup>	US \$13.5 million	US \$ 22.5 million

- (1) The Company has completed Milestone 6 at a total cost of US \$13.1 million. As of the date of this short form prospectus, a residual amount of \$3.3 million is included in the Company's accounts payable.
- (2) The Company has completed Milestone 7 at a total cost of US \$5.2 million. As of the date of this short form prospectus, the full amount has been incurred and is included in the Company's accounts payable.
- (3) This is the residual of the net proceeds of the Offering. The increase in the amount of working capital under the Maximum Offering is due to the greater amount of funds available.
- (4) Assuming no exercise of the Over-Allotment Option.

Please see “*Summary of Description of Business – Development Objectives*” for a description of the development milestones of the Company.

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. Additional funding will be required, despite completion of the Offering, for the development of the robotic surgical system, as discussed under the section “*Summary of Description of Business – Development Objectives*”.

Absent the proceeds from the Offering, the Company anticipates that it will be able to continue to operate for less than 1 month from the date of this short form prospectus based on its estimated cash on hand and projected expenditures and it may not be able to meet its contractual obligations with its suppliers. This estimate assumes continued support and cooperation from the Company's service providers. See “*Risk Factors – Additional Financing and Going Concern*” and “*Risk Factors – Reliance on External Suppliers and Development Firms*”.

In the event of the Minimum Offering, the Company estimates that it will be able to continue to operate for approximately 3 months from the date of this short form prospectus. In the event of the Maximum Offering, the Company estimates that it will be able to continue to operate for approximately 4 to 6 months from the date of this short form prospectus.

The Company has not generated any revenue from product sales to date and it is possible that it will never complete the development of its robotic surgical system or have sufficient product sales revenue to achieve profitability and positive cash flow. Management expects that the Company will continue to incur losses for the foreseeable future. To become profitable, the Company must successfully develop, manufacture, market and sell the robotic surgical

system, as well as related consumable products and accessories. If funding is insufficient at any time in the future, the Company may not be able to develop its products or continue operations. 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 entered into between the Company and the Agent, the Company has agreed to sell and the Agent has 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 and Warrants upon issuance. The Offering Price was determined by negotiation between the Company and the Agent.

The completion of the Offering may occur in one or more separate closings on one or more Closing Dates, as the Company and the Agent may agree. Provided that the Minimum Offering is subscribed for, it is expected that the first Closing Date will occur on or about October 24, 2019, or such other date as the Company and the Agent may agree.

If subscriptions for the Minimum Offering (US\$ [●]) have not been received within 10 days following the date of issuance of a receipt for this short form prospectus, the Offering will not continue and the subscription proceeds will be returned to subscribers, without interest or deduction. In any event, the total period of the distribution will not end more than 45 days from the date of issuance of a receipt for this short form prospectus. Should a closing occur in respect of the Minimum Offering, one or more additional closings, if necessary, may occur until the earlier of the Maximum Offering being subscribed and the expiry of the 45-day period.

There can be no assurance that any or all of the Units being offered will be sold.

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

Pending receipt of the Minimum Offering amount by the Agent, all subscription proceeds from United States investors will be placed in an escrow account established by the United States sub-agent for this purpose, in accordance with U.S. SEC Rule 10b-9 and applicable FINRA rules, with Bridgewater Bank 3800 American Blvd West, Suite 100 Bloomington, MN 55431, as escrow agent, to be released to the Agent (and then to the Company) at the first Closing Date.

The Warrants will be created and issued pursuant to the terms of the Warrant Indenture. Each Warrant will entitle the holder thereof to purchase one Warrant Share at an exercise price of US \$[●] per Warrant Share, subject to adjustment, at any time until 5:00 p.m. (Toronto time) on the date that is [●] months after the first Closing Date, after which time the Warrants will expire and be void and of no value. The Warrant Indenture 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 Agent under the Agency Agreement may be terminated by the Agent at any time in its sole discretion on the basis of its assessment of the state of the financial markets and on the occurrence of certain stated events. While the Agent has agreed to use its best efforts to sell the Units offered hereby, the Agent is not obligated to purchase Units that are not sold.

The Company has granted the Agent the Over-Allotment Option, exercisable in whole or in part at any time and from time to time from the date of the Agency Agreement to 30 days following the first Closing Date, to offer for sale such number of additional Units as is equal to 15% of the number of Units issued under the Offering, solely to cover over-allotments, if any, and for market stabilization purposes. The Over-Allotment Option may be exercised by the Agent in respect of Over-Allotment Units at the Offering Price, Over-Allotment Warrants at a price of US \$[●] per Over-Allotment Warrant and/or any combination of Over-Allotment Units and/or Over-Allotment Warrants

so long as the aggregate number of Over-Allotment Units and/or Over-Allotment Warrants does not exceed 15% of the number of Units issued under the Offering (excluding those pursuant to the Over-Allotment Option). Any United States registered broker-dealers that are appointed by the Agent as sub-agents will not participate in the exercise of the Over-Allotment Option or sale of any Over-Allotment Units and/or Over-Allotment Warrants. This short form prospectus qualifies the grant of the Over-Allotment Option and the distribution of the Over-Allotment Units and/or the Over-Allotment Warrants. A purchaser who acquires securities forming part of the Agent's over-allocation position acquires those securities under this short form prospectus, regardless of whether such over-allocation position is ultimately filled through the exercise of the Over-Allotment Option or through secondary market purchases.

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 will appoint the Agent to offer the Units to the public pursuant to the securities legislation of each of the provinces of British Columbia, Alberta and Ontario. The Agent will also offer for sale the Units in the United States, by or through United States registered broker-dealers that may be appointed by the Agent as sub-agents, pursuant to the MJDS implemented by securities regulatory authorities in the United States and Canada. In addition, the Agent is entitled to offer the Units outside of Canada and the United States to non-U.S. persons provided that the Agent 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, on each Closing Date, the Agent's Commission of 7% of the gross proceeds of the Offering (or US \$[●] per Unit) including any proceeds raised through the sale of Over-Allotment Units and/or Over-Allotment Warrants pursuant to the exercise of the Over-Allotment Option.

The Company has also agreed to grant, on each Closing Date, a number of Broker Warrants to the Agent and its designees equal to 7% of the aggregate number of Units issued pursuant to the Offering on such Closing Date, including those Over-Allotment Units and/or Over-Allotment Warrants issued pursuant to the Over-Allotment Option. Each Broker Warrant, whether issued on the first Closing Date or a subsequent Closing Date, shall be exercisable for a period of 24 months following the first 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.

Any Broker Warrants and any Broker Warrant Shares received by United States registered broker-dealers that are appointed by the Agent as sub-agents shall be granted only in respect of Units sold in the Offering and not pursuant to the exercise of the Over-Allotment Option. Pursuant to FINRA Rule 5110(g), such Broker Warrants and Broker Warrant Shares shall not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of effectiveness or commencement of sales of this offering, except the transfer of any security: (i) by operation of law or by reason of the Company's reorganization; (ii) to any FINRA member firm participating in the offering and the officers or partners thereof, if all securities so transferred remain subject to the lock-up restriction set forth above for the remainder of the time period; (iii) if the aggregate amount of the Company's securities held by the underwriter or related persons do not exceed 1% of the securities being offered; (iv) that is beneficially owned on a pro rata basis by all equity owners of an investment fund, provided that no participating member manages or otherwise directs investments by the fund and the participating members in the aggregate do not own more than 10% of the equity in the fund; or (v) the exercise or conversion of any security, if all securities remain subject to the lock-up restriction set forth above for the remainder of the time period.

The Company has agreed to reimburse the legal fees and expenses of any United States registered broker-dealers that are appointed by the Agent as sub-agents in an amount not to exceed US \$15,000 in the aggregate.

Certificates evidencing the Offered Shares and the Warrants will not be issued unless a request for a certificate is made to the Company.

**The Company intends to apply to the TSX to list, and to notify Nasdaq of the listing of, the Offered Shares, the Warrant Shares, the Over-Allotment Shares, the Over-Allotment Warrant Shares and the Broker Warrant**

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

The Company has agreed to indemnify the Agent and its 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 Agent or its 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 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) a bid or purchase permitted under the Universal Market Integrity Rules for Canadian Marketplaces administered by the Investment Industry Regulatory Organization of Canada relating to market stabilization and passive market making activities, (b) a bid or purchase made for and on behalf of a customer where the order was not solicited during the period of the distribution, provided that the bid or purchase was for the purpose of maintaining a fair and orderly market and not engaged in for the purpose of creating actual or apparent active trading in, or raising the price of, such securities, or (c) a bid or purchase to cover a short position entered into prior to the commencement of a prescribed restricted period. Consistent with these requirements, and in connection with this distribution, the Agent may over-allot or effect transactions that stabilize or maintain the market price of the Common Shares at levels other than those which otherwise might prevail on the open market. If these activities are commenced, they may be discontinued by the Agent at any time. The Agent may carry out these transactions on the TSX, on the Nasdaq or otherwise.

### **ENFORCEABILITY OF CIVIL LIABILITIES**

The Company is a corporation existing under and governed by the *Business Corporations Act* (Ontario). A number of the directors and officers of the Company, and some of the experts named in this short form prospectus, are residents of Canada or otherwise reside outside the United States and a substantial portion of the Company’s assets and the assets of such persons are located outside the United States. The Company has appointed an agent for service of process in the United States, but it may be difficult for holders of Offered Shares and Warrants who reside in the United States to effect service within the United States upon those directors, officers and experts who are not residents of the United States. It may also be difficult for holders of Offered Shares and Warrants who reside in the United States to realize in the United States upon judgments of courts of the United States predicated upon the Company’s civil liability and the civil liability of the directors and officers of the Company and experts under U.S. federal securities laws.

The Company has been advised by its Canadian counsel, Borden Ladner Gervais LLP, that, subject to certain limitations, a judgment of a U.S. court predicated solely upon civil liability under U.S. federal securities laws may be enforceable in Canada if the U.S. court in which the judgment was obtained has a basis for jurisdiction in the matter that would be recognized by a Canadian court for the same purposes. The Company has also been advised by Borden Ladner Gervais LLP, however, that there is substantial doubt whether an action could be brought in Canada in the first instance on the basis of liability predicated solely upon U.S. federal securities laws without further substantial connection to Canada or its residents.

Concurrently with filing its registration statement on Form F-10 of which this short form prospectus forms a part, the Company filed a Form F-X, pursuant to which the Company appointed CT Corporation System as its agent for

service of process in the United States in connection with any investigation or administrative proceeding conducted by the SEC, and any civil suit or action brought against or involving the Company in a U.S. court arising out of or related to or concerning the Offering.

## **RISK FACTORS**

**Investing in the Company's 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 16 of the AIF, and the other documents incorporated by reference in this short form prospectus that summarize the risks that may materially affect the Company's business before making an investment in the Company's securities. Please see "*Documents Incorporated by Reference*". If any of these risks occur, the Company's business, results of operations or financial condition could be materially adversely affected. In that case, the trading price of the 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 the Company faces. 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 financial statements and the related notes.

### **Risk Factors Related to the Company**

#### ***Additional Financing and Going Concern***

The Company will require additional financing in order to continue its research and development program. The ability of the Company to arrange such financing in the future will continue to 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, now or in the future, or are not available on acceptable terms, the Company may not be able to take advantage of opportunities, pay incurred or future contractual obligations to suppliers or otherwise respond to competitive pressures and the Company will need to reduce or terminate its development plan.

#### ***History of Losses***

The Company has a history of losses, and there is no assurance that any of its contemplated products will generate any revenues or 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 period ended September 30, 2019 and this negative cash flow is expected to continue.

#### ***Reliance on External Suppliers and Development Firms***

The Company is dependent on external suppliers and development firms to conduct its technology research and development and manufacturing of evaluation units of its robotic surgical system. The Company has entered into a new letter agreement with its primary product development supplier to change the terms of its deposit arrangements with this supplier and, as part of this new arrangement, the supplier has terminated the employment or engagement of a significant number of the employees and contractors who had been working with the supplier on the development of the Company's robotic surgical system. The Company's relationship with another service provider has deteriorated and the service provider has delivered to the Company the Service Provider Demand Letter. The Company has responded with the Company Response Letter instructing the service provider to cease all work on behalf of the Company. There is no assurance that the Company will be able to replace the services that had been provided by this service provider with another service provider on a timely and cost effective basis. See "*Recent Developments – Relationships with Key Suppliers*".

If any of 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 its robotic surgical system, or may be delayed in doing so, and the costs for developing the Company's 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 robotic surgical system on conditions and in a manner that is agreeable to the Company, it may need to identify and engage other suitable 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 execution of the robotic surgical system development program, but it does not control many aspects of their activities. As a result, many important aspects (including costs and timing) of product development are outside the Company's direct control.

The Company is responsible for ensuring that its robotic 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 preclinical 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.

The delays and uncertainty in raising sufficient financing may cause delays and disruption in the Company's development program and adversely affect the Company's relationships with its key suppliers. As disclosed above, the Company's relationships with certain suppliers are already strained. Further damage to the Company's relationship with one or more suppliers may have a material adverse effect on the Company.

The Company currently has amounts owing and past due on certain invoices with several key external suppliers and development firms engaged by the Company to develop its robotic surgical system. If these external firms decide to discontinue their relationship with the Company or take some other adverse action because of non-payment, the Company may not be able to complete the development of its robotic surgical system (including the development milestones for which the Company proposes to raise financing pursuant to the Offering), or may be delayed in doing so, and the costs for developing the Company's products may significantly increase beyond those forecasted.

### ***Trade-marks***

Although the Company has registrations and pending applications for certain trade-marks, it may not own or license trade-mark registrations for the marks and names that it is currently using in connection with products under development, or for the Company's name, in any jurisdiction including the proposed principal markets where, provided it finalizes development and obtains regulatory clearance, it plans to market and sell the robotic surgical system. The Company may be unable to obtain or maintain trade-mark registrations for the marks and names it uses in one or more countries. It is possible that the use of "Titan", "Titan Medical" or variations thereof may infringe or contravene the rights, including trade-mark 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. 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 trade-mark rights. These proceedings may occur even if the Company ceases using these marks and names. The Company may incur substantial costs to defend and/or enforce its rights, if any, in these marks and names in such legal proceedings. The Company 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. The Company may incur substantial costs to change the names and marks used by it, including the names and marks used in association with its products. In any such events, the business and operations of the Company could be materially adversely affected.

## ***Regulatory***

In order to legally market and sell its products in the United States and Europe, the Company must successfully achieve premarket clearance from the FDA and the CE Mark from European authorities, respectively. In preliminary correspondence, based on the limited data submitted to date regarding the robotic surgical system, and depending on its intended indications for use, and the selected predicate device, the FDA has indicated that in addition to preclinical human factors, bench, animal, and human cadaver studies, it expects that confirmatory human clinical performance testing will be necessary for demonstrating substantial equivalence. However, the FDA also indicated that preclinical evaluations using acute and chronic in vivo models and cadaver testing may be used to help establish substantial equivalence and reduce the extent of confirmatory clinical testing necessary. Given the uncertainty of, among other things, product development timelines, regulatory requirements, the timing and number of future animal studies, human cadaver and clinical studies that may be required, and the availability of required capital to fund development and operating costs, the actual costs and timing of completion of development of the robotic surgical system including obtaining the required regulatory approvals may exceed management's current expectations.

## ***Profitability***

There is no assurance that the Company will earn profits in the future.

### ***There is no assurance the Company will continue to meet the listing requirements of the TSX and the Nasdaq***

The Company must meet continuing listing requirements to maintain the listing of the Common Shares on the TSX and the Nasdaq. The inability to meet the continuing listing requirements could adversely affect the Company's results of operations or financial condition.

### ***The Company may lose its status as a foreign private issuer.***

In order to maintain its status as a foreign private issuer, a majority of the Common Shares must be either directly or indirectly owned by non-residents of the U.S. unless the Company also satisfies one of the additional requirements necessary to preserve this status. The Company may in the future lose its foreign private issuer status if a majority of its Common Shares are held in the United States and if it fails to meet the additional requirements necessary to avoid loss of its foreign private issuer status. The regulatory and compliance costs under U.S. federal securities laws as a U.S. domestic issuer may be significantly more than the costs incurred as a Canadian foreign private issuer eligible to use the MJDS. If the Company is not a foreign private issuer, it would not be eligible to use the MJDS or other foreign issuer forms and would be required to file periodic and current reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive than the forms available to a foreign private issuer. In addition, the Company may lose the ability to rely upon exemptions from NYSE corporate governance requirements that are available to foreign private issuers.

### ***The Company is an "emerging growth company" and cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make it less attractive to investors.***

The Company is an "emerging growth company" as defined in the JOBS Act. The Company will continue to qualify as an "emerging growth company" until the earliest to occur of: (a) the last day of the fiscal year during which the Company had total annual gross revenues of US\$1,070,000,000 or more; (b) the last day of its fiscal year following the fifth anniversary of the date of the first sale of the Company's common equity securities pursuant to an effective registration statement under the U.S. Securities Act, such as the Form F-10 registration statement that is being filed concurrently with this short form prospectus; (c) the date on which the Company, during the previous 3-year period, issued more than US\$1,000,000,000 in non-convertible debt; or (d) the date on which the Company is deemed to be a 'large accelerated filer.'

For so long as the Company continues to qualify as an emerging growth company, it will be exempt from the requirement to include an auditor attestation report relating to internal control over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act in its annual reports filed under the U.S. Exchange Act, as amended, even if it does not qualify as a "smaller reporting company," as well as certain other exemptions from various reporting

requirements that are applicable to other public companies.

### **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 will 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 has been determined by negotiations between the Company and the Agent. The allocation of the Offering Price between the Offered Shares and the Warrants comprising the Units has been determined by the Company.

#### ***Enforcement of judgments against foreign persons may not be possible***

Canadian investors should be aware that each of the Non-Resident Directors 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 the Non-Resident Directors. All or a substantial portion of the assets of each of the Non-Resident Directors are likely to be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against the Non-Resident Directors in Canada or to enforce a judgment obtained in Canadian courts against the Non-Resident Directors 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, the Nasdaq and the SEC. 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, including 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.

The Company is also subject to corporate governance standards that apply to it as a foreign issuer listed on the Nasdaq and registered with the SEC in the United States. Although the Company substantially complies with the

Nasdaq's corporate governance guidelines, it is exempt from certain Nasdaq requirements because the Company is subject to Canadian corporate governance requirements. The Company may from time to time seek other relief from corporate governance and exchange requirements and securities laws from the Nasdaq and other regulators.

***The Company is likely a "passive foreign investment company", which may have adverse U.S. federal income tax consequences for U.S. investors.***

Potential investors in the Units who are U.S. taxpayers should be aware that the Company believes it was classified as a "passive foreign investment company" or "PFIC" during the tax year ended December 31, 2018, and based on current business plans and financial expectations, the Company expects that it may be a PFIC for the current tax year and future tax years. If the Company is a PFIC for any year during a U.S. taxpayer's holding period of Common Shares, Warrants or Warrant Shares, then such U.S. taxpayer generally will be required to treat any gain realized upon a disposition of the Common Shares, Warrants or Warrant Shares or any so-called "excess distribution" received on its Common Shares and Warrant Shares, as ordinary income, and to pay an interest charge on a portion of such gain or distribution. In certain circumstances, the sum of the tax and the interest charge may exceed the total amount of proceeds realized on the disposition, or the amount of excess distribution received, by the U.S. taxpayer. Subject to certain limitations, these tax consequences may be mitigated if a U.S. taxpayer makes a timely and effective QEF Election or a Mark-to-Market Election. Subject to certain limitations, such elections may be made with respect to the Common Shares and Warrant Shares. A U.S. taxpayer may not make a QEF Election or Mark-to-Market Election with respect to the Warrants. A U.S. taxpayer who makes a timely and effective QEF Election generally must report on a current basis its share of the Company's net capital gain and ordinary earnings for any year in which the Company is a PFIC, whether or not the Company distributes any amounts to its shareholders. However, U.S. taxpayers should be aware that there can be no assurance that the Company will satisfy the record keeping requirements that apply to a qualified electing fund, or that the Company will supply U.S. taxpayers with information that such U.S. taxpayers require to report under the QEF Election rules, in the event that the Company is a PFIC and a U.S. taxpayer wishes to make a QEF Election. Thus, U.S. taxpayers may not be able to make a QEF Election with respect to their Common Shares. A U.S. taxpayer who makes the Mark-to-Market Election generally must include as ordinary income each year the excess of the fair market value of the Common Shares or Warrant Shares over the taxpayer's basis therein. This paragraph is qualified in its entirety by the discussion below under the heading "Certain United States Federal Income Tax Considerations — Passive Foreign Investment Company Rules." Each potential investor who is a U.S. taxpayer should consult its own tax advisor regarding the tax consequences of the PFIC rules and the acquisition, ownership, and disposition of the Common Shares, Warrants and the Warrant Shares.

## **ELIGIBILITY FOR INVESTMENT**

In the opinion of Borden Ladner Gervais LLP, counsel for the Company, and Baker & McKenzie LLP, counsel to the 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 Nasdaq); 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 and Nasdaq), or (ii) the Warrant Shares are listed on a "designated stock exchange" as defined in the Tax Act (which includes the TSX and Nasdaq) 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, RRIF, RDSP or RESP are "prohibited investments" for purposes of the Tax Act, the holder of the TFSA or RDSP, the annuitant of the RRSP or RRIF or the subscriber of the RESP 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 RDSP, the annuitant of a RRSP or RRIF or the subscriber of the RESP, 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, RRIF, RDSP or RESP. 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 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, 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.

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, 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; (vi) that receives dividends on Common Shares under or as part of a “dividend rental arrangement” within the meaning of the Tax Act; or (vii) a Holder that is a corporation and is, or becomes as part of a transaction or event or series of transactions or events that includes the acquisition of the Offered Shares and Warrant Shares, controlled by a (A) non-resident corporation, (B) non-resident individual, (C) non-resident trust, or (D) group of any of the foregoing who do no deal at arm’s length with each other, for the purposes of section 212.3 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 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, the Company intends to allocate US \$[●] to the Offered Share and US \$[●] to the 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.

### **Holders Resident in Canada**

The following section of this summary is generally applicable to a Holder who, for purposes of the Tax Act and any applicable tax treaty or convention, is or is deemed to be resident of Canada at all relevant times (a "Resident Holder"). Certain Resident 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. **Resident Holders contemplating such an election should consult their own advisors.**

### ***Expiry of Warrants***

In the event of the expiry of an unexercised Warrant, the Resident Holder will realize a capital loss equal to the Resident 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 Resident Holder's income. In the case of a Resident 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 Resident 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".

Resident Holders who are individuals (other than certain trusts) may be subject to alternative minimum tax in respect of taxable dividends.

In the case of a Resident 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 Resident Holder that is a corporation as proceeds of disposition or a capital gain. Resident Holders that are corporations should consult their own tax advisors having regard to their own circumstances.

Resident 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 Resident Holder’s taxable income for the year. This refundable tax generally will be refunded to a Resident 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 Resident 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 Resident 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 Resident 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 Resident 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. Resident Holders to whom these rules may be relevant should consult their own tax advisors.

A Resident 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. Resident Holders who are individuals (other than certain trusts) may be subject to alternative minimum tax in respect of capital gains.

**Resident 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.**

### **Holders Not Resident in Canada**

The following section of this summary is generally applicable to Holders who for the purposes of the Tax Act and any applicable tax treaty or convention and at all relevant times (i) have not been and will not be deemed to be

resident in Canada at any time while they hold the Common Shares or Warrants; and (ii) do not use or hold the Common Shares or Warrants in carrying on a business in Canada (“Non-Resident Holders”).

Special rules, which are not discussed in this summary, may apply to a Non-Resident Holder that is an insurer carrying on business in Canada and elsewhere. Such Non-Resident Holders should consult their own tax advisors.

### ***Dividends***

Dividends paid or credited or deemed to be paid or credited to a Non-Resident Holder by the Company will be subject to Canadian withholding tax at the rate of 25% on the gross amount of the dividend unless such rate is reduced by the terms of an applicable tax treaty. Under the *Canada-United States Tax Convention (1980)*, as amended (the “Treaty”), the rate of withholding tax on dividends paid or credited to a Non-Resident Holder who is resident in the U.S. for purposes of the Treaty and fully entitled to benefits under the Treaty (a “U.S. Holder”) is generally limited to 15% of the gross amount of the dividend (or 5% in the case of a U.S. Holder that is a company beneficially owning at least 10% of the Company’s voting shares).

### ***Dispositions of Common Shares and Warrants***

A Non-Resident Holder generally will not be subject to tax under the Tax Act in respect of a capital gain realized on the disposition or deemed disposition of a Common Share or a Warrant, nor will capital losses arising therefrom be recognized under the Tax Act, unless the Common Share or Warrant constitutes “taxable Canadian property” to the Non-Resident Holder for purposes of the Tax Act, and the gain is not exempt from tax pursuant to the terms of an applicable tax treaty.

Provided the Common Shares are listed on a “designated stock exchange”, as defined in the Tax Act (which includes the TSX and Nasdaq), at the time of disposition, the Common Shares and Warrants generally will not constitute taxable Canadian property of a Non-Resident Holder at that time, unless at any time during the 60 month period immediately preceding the disposition the following two conditions are met concurrently: (i) the Non-Resident Holder, persons with whom the Non-Resident Holder did not deal at arm’s length, partnerships in which the Non-Resident Holder or such non-arm’s length person holds a membership interest (either directly or indirectly through one or more partnerships), or the Non-Resident Holder together with all such persons, owned 25% or more of the issued shares of any class or series of shares of the Company; and (ii) more than 50% of the fair market value of the Common Shares of the Company was derived directly or indirectly from one or any combination of real or immovable property situated in Canada, “Canadian resource properties” (as defined in the Tax Act), “timber resource properties” (as defined in the Tax Act) or an option, an interest or right in such property, whether or not such property exists. Notwithstanding the foregoing, a Common Share or Warrant may otherwise be deemed to be taxable Canadian property to a Non-Resident Holder for purposes of the Tax Act in certain circumstances. A Non-Resident Holder’s capital gain (or capital loss) in respect of a disposition of Common Shares or Warrants that constitute or are deemed to constitute taxable Canadian property to a Non-Resident Holder (and are not “treaty-protected property” as defined in the Tax Act) will generally be computed in the manner described above under the subheading “Holders Resident in Canada — Disposition of Common Shares and Warrants”. Non-Resident Holders whose Common Shares or Warrants are taxable Canadian property should consult their own tax advisors regarding the tax and compliance considerations that may be relevant to them.

## **CERTAIN UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS**

The following is a general summary of certain U.S. federal income tax considerations applicable to a U.S. Holder (as defined below) arising from and relating to the acquisition, ownership and disposition of Units acquired pursuant to this short form prospectus, the acquisition, ownership, and disposition of Common Shares acquired as part of the Units, the exercise, disposition, and lapse of Warrants acquired as part of the Units, and the acquisition, ownership, and disposition of Warrant Shares received upon exercise of the Warrants.

This summary is for general information purposes only and does not purport to be a complete analysis or listing of all potential U.S. federal income tax considerations that may apply to a U.S. Holder as a result of the acquisition of Units pursuant to this Offering. In addition, this summary does not take into account the individual facts and circumstances of any particular U.S. Holder that may affect the U.S. federal income tax consequences to such U.S.

Holder, including specific tax consequences to a U.S. Holder under an applicable tax treaty. Accordingly, this summary is not intended to be, and should not be construed as, legal or U.S. federal income tax advice with respect to any particular U.S. Holder. This summary does not address the U.S. federal net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences to U.S. Holders of the acquisition, ownership, and disposition of Units, Common Shares, Warrants and Warrant Shares. In addition, except as specifically set forth below, this summary does not discuss applicable tax reporting requirements. Each U.S. Holder should consult its own tax advisor regarding the U.S. federal, federal U.S. net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership and disposition of Units, Common Shares, Warrants, and Warrant Shares.

No opinion from legal counsel or ruling from the Internal Revenue Service (the “IRS”) has been requested, or will be obtained, regarding the U.S. federal income tax considerations applicable to U.S. Holders as discussed in this summary. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, and contrary to, the positions taken in this summary. In addition, because the authorities on which this summary is based are subject to various interpretations, the IRS and the U.S. courts could disagree with one or more of the positions taken in this summary.

## **Scope of this Summary**

### Authorities

This summary is based on the Internal Revenue Code of 1986, as amended (the “Code”), Treasury Regulations (whether final, temporary, or proposed) promulgated under the Code, published rulings of the IRS, published administrative positions of the IRS and U.S. court decisions, that are in effect and available, as of the date of this document. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied retroactively. This summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation that, if enacted, could be applied on a retroactive or prospective basis.

### U.S. Holders

For purposes of this summary, the term “U.S. Holder” means a beneficial owner of Units, Common Shares, Warrants or Warrant Shares acquired pursuant to this U.S. Placement Memorandum that is for U.S. federal income tax purposes:

- a citizen or individual resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate whose income is subject to U.S. federal income taxation regardless of its source; or
- a trust that (1) is subject to the primary supervision of a court within the United States and the control of one or more U.S. persons for all substantial decisions or (2) has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

### U.S. Holders Subject to Special U.S. Federal Income Tax Rules Not Addressed

This summary does not address the U.S. federal income tax considerations applicable to U.S. Holders that are subject to special provisions under the Code, including U.S. Holders that: (a) are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax-deferred accounts; (b) are financial institutions, underwriters, insurance companies, real estate investment trusts, or regulated investment companies; (c) are brokers or dealers in securities or currencies or U.S. Holders that are traders in securities that elect to apply a mark-to-market accounting method; (d) have a “functional currency” other than the U.S. dollar; (e) own Units, Common Shares, Warrants or Warrant Shares as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other integrated transaction; (f) acquired Units, Common Shares, Warrants or Warrant Shares in connection with the exercise of employee stock options or otherwise as compensation for services; (g) hold

Units, Common Shares, Warrants or Warrant Shares other than as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment purposes); (h) are partnerships and other pass-through entities (and investors in such partnerships and entities); (i) are required to accelerate the recognition of any item of gross income with respect to Common Shares, Warrants or Warrant Shares as a result of such income being recognized on an applicable financial statement; or (j) own, have owned or will own (directly, indirectly, or by attribution) 10% or more of the total combined voting power or value of the Company's outstanding shares. This summary also does not address the U.S. federal income tax considerations applicable to U.S. Holders who are (a) U.S. expatriates or former long-term residents of the U.S., or (b) subject to taxing jurisdictions other than, or in addition to, the United States. U.S. Holders that are subject to special provisions under the Code, including U.S. Holders described immediately above, should consult their own tax advisors regarding the U.S. federal, U.S. federal net investment income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership and disposition of Units, Common Shares, Warrants or Warrant Shares.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds Units, Common Shares, Warrants or Warrant Shares, the U.S. federal income tax consequences to such entity or arrangement and the owners of such entity or arrangement generally will depend on the activities of such entity or arrangement and the status of such owners. This summary does not address the tax consequences to any such entity or arrangement or owner. Owners of entities or arrangements that are classified as partnerships for U.S. federal income tax purposes should consult their own tax advisor regarding the U.S. federal income tax consequences arising from and relating to the acquisition, ownership, and disposition of Units, Common Shares, Warrants and Warrant Shares.

#### **U.S. Federal Income Tax Consequences of the Acquisition of Units**

For U.S. federal income tax purposes, the acquisition by a U.S. Holder of a Unit will be treated as the acquisition of one Common Share and one Warrant. The purchase price for each Unit will be allocated between these two components in proportion to their relative fair market values at the time the Unit is purchased by the U.S. Holder. This allocation of the purchase price for each Unit will establish a U.S. Holder's initial tax basis for U.S. federal income tax purposes in the Common Share and Warrant that comprise each Unit.

For this purpose, the Company will allocate US \$[●] of the purchase price for the Unit to the Common Share and US \$[●] of the purchase price for each Unit to the Warrant. However, the IRS will not be bound by such allocation of the purchase price for the Units, and therefore, the IRS or a U.S. court may not respect the allocation set forth above. Each U.S. Holder should consult its own tax advisor regarding the allocation of the purchase price for the Units.

#### **Passive Foreign Investment Company Rules**

If the Company is considered a "passive foreign investment company" within the meaning of Section 1297 of the Code (a "PFIC") at any time during a U.S. Holder's holding period, the following sections will generally describe the potentially adverse U.S. federal income tax consequences to U.S. Holders of the acquisition, ownership, and disposition of Units, Common Shares, Warrants or Warrant Shares.

The Company believes that it was classified as a PFIC for the tax year ended December 31, 2018, and based on current business plans and financial expectations, the Company expects that it may be a PFIC for the tax year ended December 31, 2019 and may be a PFIC in future tax years. No opinion of legal counsel or ruling from the IRS concerning the status of the Company as a PFIC has been obtained or is currently planned to be requested. The determination of whether any corporation was, or will be, a PFIC for a tax year depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations. In addition, whether any corporation will be a PFIC for any tax year depends on the assets and income of such corporation over the course of each such tax year and, as a result, the Company's PFIC status for the current year and future years cannot be predicted with certainty as of the date of this document. Accordingly, there can be no assurance that the IRS will not challenge any PFIC determination made by the Company (or by one of the Company's subsidiaries). Each U.S. Holder should consult its own tax advisor regarding the Company's status as a PFIC and the PFIC status of each non-U.S. subsidiary of the Company.

In any year in which the Company is classified as a PFIC, a U.S. Holder will be required to file an annual report with the IRS containing such information as Treasury Regulations and/or other IRS guidance may require. In addition to penalties, a failure to satisfy such reporting requirements may result in an extension of the time period during which the IRS can assess a tax. U.S. Holders should consult their own tax advisors regarding the requirements of filing such information returns under these rules, including the requirement to file an IRS Form 8621.

The Company generally will be a PFIC for any tax year in which (a) 75% or more of the gross income of the Company for such tax year is passive income (the “PFIC income test”) or (b) 50% or more of the value of the assets of the Company either produce passive income or are held for the production of passive income, based on the quarterly average of the fair market value of such assets (the “PFIC asset test”). “Gross income” generally includes sales revenues less the cost of goods sold, plus income from investments and from incidental or outside operations or sources, and “passive income” generally includes, for example, dividends, interest, certain rents and royalties, certain gains from the sale of stock and securities, and certain gains from commodities transactions.

For purposes of the PFIC income test and PFIC asset test described above, if the Company owns, directly or indirectly, 25% or more of the total value of the outstanding shares of another corporation, the Company will be treated as if it (a) held a proportionate share of the assets of such other corporation and (b) received directly a proportionate share of the income of such other corporation. In addition, for purposes of the PFIC income test and PFIC asset test described above, “passive income” does not include any interest, dividends, rents, or royalties that are received or accrued by the Company from a “related person” (as defined in Section 954(d)(3) of the Code), to the extent such items are properly allocable to the income of such related person that is not passive income.

Under certain attribution rules, if the Company is a PFIC, U.S. Holders will be deemed to own their proportionate share of any of the Company’s subsidiaries which is also a PFIC (a “Subsidiary PFIC”), and will generally be subject to U.S. federal income tax under the “Default PFIC Rules Under Section 1291 of the Code” discussed below on their proportionate share of any (i) distribution on the shares of a Subsidiary PFIC and (ii) disposition or deemed disposition of shares of a Subsidiary PFIC, both as if such U.S. Holders directly held the shares of such Subsidiary PFIC. Accordingly, U.S. Holders should be aware that they could be subject to tax under the PFIC rules even if no distributions are received and no redemptions or other dispositions of Units, Common Shares, Warrants or Warrant Shares are made. In addition, U.S. Holders may be subject to U.S. federal income tax on any indirect gain realized on the stock of a Subsidiary PFIC on the sale or disposition of Units, Common Shares, Warrants or Warrant Shares.

#### Default PFIC Rules Under Section 1291 of the Code

If the Company is a PFIC, the U.S. federal income tax consequences to a U.S. Holder of the purchase of Units and the acquisition, ownership, and disposition of Common Shares, Warrants and Warrant Shares will depend on whether such U.S. Holder makes a “qualified electing fund” or “QEF” election (a “QEF Election”) or makes a mark-to-market election under Section 1296 of the Code (a “Mark-to-Market Election”) with respect to Common Shares or Warrant Shares. A U.S. Holder that does not make either a QEF Election or a Mark-to-Market Election (a “Non-Electing U.S. Holder”) will be taxable as described below.

A Non-Electing U.S. Holder will be subject to the rules of Section 1291 of the Code with respect to (a) any gain recognized on the sale or other taxable disposition of Common Shares, Warrants and Warrant Shares and (b) any excess distribution received on the Common Shares and Warrant Shares. A distribution generally will be an “excess distribution” to the extent that such distribution (together with all other distributions received in the current tax year) exceeds 125% of the average distributions received during the three preceding tax years (or during a U.S. Holder’s holding period for the Common Shares and Warrant Shares, if shorter).

Under Section 1291 of the Code, any gain recognized on the sale or other taxable disposition of Common Shares, Warrants and Warrant Shares of a PFIC (including an indirect disposition of shares of a Subsidiary PFIC), and any excess distribution received on such Common Shares and Warrant Shares (or a distribution by a Subsidiary PFIC to its shareholder that is deemed to be received by a U.S. Holder) must be rateably allocated to each day in a Non-Electing U.S. Holder’s holding period for the Common Shares or Warrant Shares. The amount of any such gain or excess distribution allocated to the tax year of disposition or distribution of the excess distribution and to years

before the entity became a PFIC, if any, would be taxed as ordinary income (and not eligible for certain preferential tax rates, as discussed below). The amounts allocated to any other tax year would be subject to U.S. federal income tax at the highest tax rate applicable to ordinary income in each such year, and an interest charge would be imposed on the tax liability for each such year, calculated as if such tax liability had been due in each such year. A Non-Electing U.S. Holder that is not a corporation must treat any such interest paid as “personal interest,” which is not deductible.

If the Company is a PFIC for any tax year during which a Non-Electing U.S. Holder holds Common Shares, Warrant Shares or Warrants, it will continue to be treated as a PFIC with respect to such Non-Electing U.S. Holder, regardless of whether it ceases to be a PFIC in one or more subsequent tax years. If the Company ceases to be a PFIC, a Non-Electing U.S. Holder may terminate this deemed PFIC status with respect to Common Shares and Warrant Shares by electing to recognize gain (which will be taxed under the rules of Section 1291 of the Code as discussed above) as if such Common Shares and Warrant Shares were sold on the last day of the last tax year for which the Company was a PFIC. No such election, however, may be made with respect to the Warrants.

Under proposed Treasury Regulations, if a U.S. holder has an option, warrant, or other right to acquire stock of a PFIC (such as the Warrants), such option, warrant or right is considered to be PFIC stock subject to the default rules of Section 1291 of the Code. Under rules described below, the holding period for the Warrant Shares will begin on the date a U.S. Holder acquires the Units. This will impact the availability of the QEF Election and Mark-to-Market Election with respect to the Warrant Shares. Thus, a U.S. Holder will have to account for Warrant Shares and Common Shares under the PFIC rules and the applicable elections differently.

#### QEF Election

A U.S. Holder that makes a QEF Election for the first tax year in which its holding period of its Common Shares begins generally will not be subject to the rules of Section 1291 of the Code discussed above with respect to its Common Shares. However, a U.S. Holder that makes a QEF Election will be subject to U.S. federal income tax on such U.S. Holder’s pro rata share of (a) the Company’s net capital gain, which will be taxed as long-term capital gain to such U.S. Holder, and (b) the Company’s ordinary earnings, which will be taxed as ordinary income to such U.S. Holder. Generally, “net capital gain” is the excess of (a) net long-term capital gain over (b) net short-term capital loss, and “ordinary earnings” are the excess of (a) “earnings and profits” over (b) net capital gain. A U.S. Holder that makes a QEF Election will be subject to U.S. federal income tax on such amounts for each tax year in which the Company is a PFIC, regardless of whether such amounts are actually distributed to such U.S. Holder by the Company. However, for any tax year in which the Company is a PFIC and has no net income or gain, U.S. Holders that have made a QEF Election would not have any income inclusions as a result of the QEF Election. If a U.S. Holder that made a QEF Election has an income inclusion, such a U.S. Holder may, subject to certain limitations, elect to defer payment of current U.S. federal income tax on such amounts, subject to an interest charge. If such U.S. Holder is not a corporation, any such interest paid will be treated as “personal interest,” which is not deductible.

A U.S. Holder that makes a timely QEF Election generally (a) may receive a tax-free distribution from the Company to the extent that such distribution represents “earnings and profits” that were previously included in income by the U.S. Holder because of such QEF Election and (b) will adjust such U.S. Holder’s tax basis in the Common Shares to reflect the amount included in income or allowed as a tax-free distribution because of such QEF Election. In addition, a U.S. Holder that makes a QEF Election generally will recognize capital gain or loss on the sale or other taxable disposition of Common Shares.

The procedure for making a QEF Election, and the U.S. federal income tax consequences of making a QEF Election, will depend on whether such QEF Election is timely. A QEF Election will be treated as “timely” for purposes of avoiding the default PFIC rules discussed above if such QEF Election is made for the first year in the U.S. Holder’s holding period for the Common Shares in which the Company was a PFIC. A U.S. Holder may make a timely QEF Election by filing the appropriate QEF Election documents at the time such U.S. Holder files a U.S. federal income tax return for such year.

A QEF Election will apply to the tax year for which such QEF Election is made and to all subsequent tax years, unless such QEF Election is invalidated or terminated or the IRS consents to revocation of such QEF Election. If

a U.S. Holder makes a QEF Election and, in a subsequent tax year, the Company ceases to be a PFIC, the QEF Election will remain in effect (although it will not be applicable) during those tax years in which the Company is not a PFIC. Accordingly, if the Company becomes a PFIC in another subsequent tax year, the QEF Election will be effective and the U.S. Holder will be subject to the QEF rules described above during any subsequent tax year in which the Company qualifies as a PFIC.

As discussed above, under proposed Treasury Regulations, if a U.S. holder has an option, warrant or other right to acquire stock of a PFIC (such as the Warrants), such option, warrant or right is considered to be PFIC stock subject to the default rules of Section 1291 of the Code. However, a U.S. Holder of an option, warrant or other right to acquire stock of a PFIC may not make a QEF Election that will apply to the option, warrant or other right to acquire PFIC stock. In addition, under proposed Treasury Regulations, if a U.S. Holder holds an option, warrant or other right to acquire stock of a PFIC, the holding period with respect to shares of stock of the PFIC acquired upon exercise of such option, warrant or other right will include the period that the option, warrant or other right was held.

Consequently, under the proposed Treasury Regulations, if a U.S. Holder of Common Shares makes a QEF Election, such election generally will not be treated as a timely QEF Election with respect to Warrant Shares and the rules of Section 1291 of the Code discussed above will continue to apply with respect to such U.S. Holder's Warrant Shares. However, a U.S. Holder of Warrant Shares should be eligible to make a timely QEF Election if such U.S. Holder elects in the tax year in which such Warrant Shares are received to recognize gain (which will be taxed under the rules of Section 1291 of the Code discussed above) as if such Warrant Shares were sold for fair market value on the date such U.S. Holder acquired them by exercising the corresponding Warrant. In addition, gain recognized on the sale or other taxable disposition (other than by exercise) of the Warrants by a U.S. Holder will be subject to the rules of Section 1291 of the Code discussed above. Each U.S. Holder should consult its own tax advisor regarding the application of the PFIC rules to the Units, Common Shares, Warrants, and Warrant Shares.

U.S. Holders should be aware that there can be no assurances that the Company will satisfy the record keeping requirements that apply to a QEF, or that the Company will supply U.S. Holders with a PFIC Annual Information Statement or other information that such U.S. Holders are required to report under the QEF rules, in the event that the Company is a PFIC. Thus, U.S. Holders may not be able to make a QEF Election with respect to their Common Shares or, assuming the election to recognize gain upon exercise described above is made, Warrant Shares. Each U.S. Holder should consult its own tax advisors regarding the availability of, and procedure for making, a QEF Election.

A U.S. Holder makes a QEF Election by attaching a completed IRS Form 8621, including a PFIC Annual Information Statement, to a timely filed U.S. federal income tax return. However, if the Company does not provide the required information with regard to the Company or any of its Subsidiary PFICs, U.S. Holders will not be able to make a QEF Election for such entity and will continue to be subject to the rules of Section 1291 of the Code discussed above that apply to Non-Electing U.S. Holders with respect to the taxation of gains and excess distributions.

#### Mark-to-Market Election

A U.S. Holder may make a Mark-to-Market Election with respect to Common Shares and Warrant Shares only if the Common Shares and Warrant Shares are marketable stock. The Common Shares and Warrant Shares generally will be "marketable stock" if the Common Shares and Warrant Shares are regularly traded on (a) a national securities exchange that is registered with the SEC, (b) the national market system established pursuant to Section 11A of the U.S. Exchange Act or (c) a foreign securities exchange that is regulated or supervised by a governmental authority of the country in which the market is located, provided that (i) such foreign exchange has trading volume, listing, financial disclosure, and other requirements and the laws of the country in which such foreign exchange is located, together with the rules of such foreign exchange, ensure that such requirements are actually enforced and (ii) the rules of such foreign exchange ensure active trading of listed stocks. If such stock is traded on such a qualified exchange or other market, such stock generally will be considered "regularly traded" for any calendar year during which such stock is traded, other than in *de minimis* quantities, on at least 15 days during each calendar quarter. Provided that the Common Shares and Warrant Shares are "regularly traded" as described

in the preceding sentence, the Common Shares and Warrant Shares are expected to be marketable stock. The Company believes that its Common Shares were “regularly traded” in the fourth calendar quarter of 2018 and expects that the Common Shares should be “regularly traded” in the first calendar quarter of 2019. However, there can be no assurance that the Common Shares will be “regularly traded” in subsequent calendar quarters. U.S. Holders should consult their own tax advisors regarding the marketable stock rules.

A U.S. Holder that makes a Mark-to-Market Election with respect to its Common Shares generally will not be subject to the rules of Section 1291 of the Code discussed above with respect to such Common Shares. However, if a U.S. Holder does not make a Mark-to-Market Election beginning in the first tax year of such U.S. Holder’s holding period for the Common Shares and such U.S. Holder has not made a timely QEF Election, the rules of Section 1291 of the Code discussed above will apply to certain dispositions of, and distributions on, the Common Shares.

Any Mark-to-Market Election made by a U.S. Holder for the Common Shares will also apply to such U.S. Holder’s Warrant Shares. As a result, if a Mark-to-Market Election has been made by a U.S. Holder with respect to Common Shares, any Warrant Shares received will automatically be marked-to-market in the year of exercise. Because, under the proposed Treasury Regulations, a U.S. Holder’s holding period for Warrant Shares includes the period during which such U.S. Holder held the Warrants, a U.S. Holder will be treated as making a Mark-to-Market Election with respect to its Warrant Shares after the beginning of such U.S. Holder’s holding period for the Warrant Shares unless the Warrant Shares are acquired in the same tax year as the year in which the U.S. Holder acquired its Units. Consequently, the default rules under Section 1291 described above generally will apply to the mark-to-market gain realized in the tax year in which Warrant Shares are received. However, the general mark-to-market rules will apply to subsequent tax years.

A U.S. Holder that makes a Mark-to-Market Election will include in ordinary income, for each tax year in which the Company is a PFIC, an amount equal to the excess, if any, of (a) the fair market value of the Common Shares and any Warrant Shares, as of the close of such tax year over (b) such U.S. Holder’s tax basis in the Common Shares and any Warrant Shares. A U.S. Holder that makes a Mark-to-Market Election will be allowed a deduction in an amount equal to the excess, if any, of (i) such U.S. Holder’s adjusted tax basis in the Common Shares and any Warrant Shares, over (ii) the fair market value of such Common Shares and any Warrant Shares (but only to the extent of the net amount of previously included income as a result of the Mark-to-Market Election for prior tax years).

A U.S. Holder that makes a Mark-to-Market Election generally also will adjust such U.S. Holder’s tax basis in the Common Shares and Warrant Shares to reflect the amount included in gross income or allowed as a deduction because of such Mark-to-Market Election. In addition, upon a sale or other taxable disposition of Common Shares and Warrant Shares, a U.S. Holder that makes a Mark-to-Market Election will recognize ordinary income or ordinary loss (not to exceed the excess, if any, of (a) the amount included in ordinary income because of such Mark-to-Market Election for prior tax years over (b) the amount allowed as a deduction because of such Mark-to-Market Election for prior tax years).

A U.S. Holder makes a Mark-to-Market Election by attaching a completed IRS Form 8621 to a timely filed U.S. federal income tax return. A timely Mark-to-Market Election applies to the tax year in which such Mark-to-Market Election is made and to each subsequent tax year, unless the Common Shares and Warrant Shares cease to be “marketable stock” or the IRS consents to revocation of such election. Each U.S. Holder should consult its own tax advisor regarding the availability of, and procedure for making, a Mark-to-Market Election.

Although a U.S. Holder may be eligible to make a Mark-to-Market Election with respect to the Common Shares and Warrant Shares, no such election may be made with respect to the stock of any Subsidiary PFIC that a U.S. Holder is treated as owning because such stock is not marketable. Hence, the Mark-to-Market Election will not be effective to eliminate the interest charge and other income inclusion rules described above with respect to deemed dispositions of Subsidiary PFIC stock or distributions from a Subsidiary PFIC to its shareholder.

#### Other PFIC Rules

Under Section 1291(f) of the Code, the IRS has issued proposed Treasury Regulations that, subject to certain

exceptions, would cause a U.S. Holder that had not made a timely QEF Election to recognize gain (but not loss) upon certain transfers of Common Shares, Warrants and Warrant Shares that would otherwise be tax-deferred (e.g., gifts and exchanges pursuant to corporate reorganizations). However, the specific U.S. federal income tax consequences to a U.S. Holder may vary based on the manner in which Common Shares, Warrants, or Warrant Shares are transferred.

If finalized in their current form, the proposed Treasury Regulations applicable to PFICs would be effective for transactions occurring on or after April 1, 1992. Because the proposed Treasury Regulations have not yet been adopted in final form, they are not currently effective, and there is no assurance that they will be adopted in the form and with the effective date proposed. Nevertheless, the IRS has announced that, in the absence of final Treasury Regulations, taxpayers may apply reasonable interpretations of the Code provisions applicable to PFICs and that it considers the rules set forth in the proposed Treasury Regulations to be reasonable interpretations of those Code provisions. The PFIC rules are complex, and the implementation of certain aspects of the PFIC rules requires the issuance of Treasury Regulations which in many instances have not been promulgated and which, when promulgated, may have retroactive effect. U.S. Holders should consult their own tax advisors about the potential applicability of the proposed Treasury Regulations.

Certain additional adverse rules will apply with respect to a U.S. Holder if the Company is a PFIC, regardless of whether such U.S. Holder makes a QEF Election. For example under Section 1298(b)(6) of the Code, a U.S. Holder that uses Common Shares, Warrants or Warrant Shares as security for a loan will, except as may be provided in Treasury Regulations, be treated as having made a taxable disposition of such Common Shares, Warrants or Warrant Shares.

In addition, a U.S. Holder who acquires Common Shares, Warrants or Warrant Shares from a decedent will not receive a “step up” in tax basis of such Common Shares, Warrants or Warrant Shares to fair market value.

Special rules also apply to the amount of foreign tax credit that a U.S. Holder may claim on a distribution from a PFIC. Subject to such special rules, foreign taxes paid with respect to any distribution in respect of stock in a PFIC are generally eligible for the foreign tax credit. The rules relating to distributions by a PFIC and their eligibility for the foreign tax credit are complicated, and a U.S. Holder should consult with their own tax advisor regarding the availability of the foreign tax credit with respect to distributions by a PFIC.

The PFIC rules are complex, and each U.S. Holder should consult its own tax advisor regarding the PFIC rules (including the applicability and advisability of a QEF Election and Mark-to-Market Election) and how the PFIC rules may affect the U.S. federal income tax consequences of the acquisition, ownership, and disposition of Common Shares, Warrants and Warrant Shares.

## **U.S. Federal Income Tax Consequences of the Exercise and Disposition of Warrants**

The following discussion describes the general rules applicable to the ownership and disposition of the Warrants but is subject in its entirety to the special rules described above under the heading “Passive Foreign Investment Company Rules.”

### Exercise of Warrants

A U.S. Holder should not recognize gain or loss on the exercise of a Warrant and related receipt of a Warrant Share (unless cash is received in lieu of the issuance of a fractional Warrant Share). A U.S. Holder’s initial tax basis in the Warrant Share received on the exercise of a Warrant should be equal to the sum of (a) such U.S. Holder’s tax basis in such Warrant plus (b) the exercise price paid by such U.S. Holder on the exercise of such Warrant. If, as anticipated, the Company is a PFIC, a U.S. Holder’s holding period for the Warrant Share will begin on the date on which such U.S. Holder acquired its Units.

### Disposition of Warrants

A U.S. Holder will recognize gain or loss on the sale or other taxable disposition of a Warrant in an amount equal

to the difference, if any, between (a) the amount of cash plus the fair market value of any property received and (b) such U.S. Holder's tax basis in the Warrant sold or otherwise disposed of. Subject to the PFIC rules discussed above, any such gain or loss generally will be a capital gain or loss, which will be long-term capital gain or loss if the Warrant is held for more than one year. Deductions for capital losses are subject to complex limitations under the Code.

#### Expiration of Warrants Without Exercise

Upon the lapse or expiration of a Warrant, a U.S. Holder will recognize a loss in an amount equal to such U.S. Holder's tax basis in the Warrant. Any such loss generally will be a capital loss and will be long-term capital loss if the Warrants are held for more than one year. Deductions for capital losses are subject to complex limitations under the Code.

#### Certain Adjustments to the Warrants

Under Section 305 of the Code, an adjustment to the number of Warrant Shares that will be issued on the exercise of the Warrants, or an adjustment to the exercise price of the Warrants, may be treated as a constructive distribution to a U.S. Holder of the Warrants if, and to the extent that, such adjustment has the effect of increasing such U.S. Holder's proportionate interest in the "earnings and profits" or the Company's assets, depending on the circumstances of such adjustment (for example, if such adjustment is to compensate for a distribution of cash or other property to the shareholders). Adjustments to the exercise price of Warrants made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing dilution of the interest of the holders of the Warrants should generally not be considered to result in a constructive distribution. Any such constructive distribution would be taxable whether or not there is an actual distribution of cash or other property. (See more detailed discussion of the rules applicable to distributions made by the Company at "Distributions on Common Shares and Warrant Shares" below).

#### **General Rules Applicable to U.S. Federal Income Tax Consequences of the Acquisition, Ownership, and Disposition of Common Shares and Warrant Shares**

The following discussion describes the general rules applicable to the ownership and disposition of the Common Shares and Warrant Shares but is subject in its entirety to the special rules described above under the heading "Passive Foreign Investment Company Rules."

#### Distributions on Common Shares and Warrant Shares

A U.S. Holder that receives a distribution, including a constructive distribution, with respect to a Common Share or Warrant Share (as well as any constructive distribution on a Warrant as described above) will be required to include the amount of such distribution in gross income as a dividend (without reduction for any Canadian income tax withheld from such distribution) to the extent of the Company's current and accumulated "earnings and profits", as computed under U.S. federal income tax principles. A dividend generally will be taxed to a U.S. Holder at ordinary income tax rates if the Company is a PFIC for the tax year of such distribution or the preceding tax year. To the extent that a distribution exceeds the current and accumulated "earnings and profits" of the Company, such distribution will be treated first as a tax-free return of capital to the extent of a U.S. Holder's tax basis in the Common Shares or Warrant Shares and thereafter as gain from the sale or exchange of such Common Shares or Warrant Shares (see "Sale or Other Taxable Disposition of Common Shares and/or Warrant Shares" below). However, the Company may not maintain the calculations of earnings and profits in accordance with U.S. federal income tax principles, and each U.S. Holder may be required to assume that any distribution by the Company with respect to the Common Shares or Warrant Shares will constitute ordinary dividend income. Dividends received on Common Shares or Warrant Shares generally will not be eligible for the "dividends received deduction" generally applicable to corporations. Subject to applicable limitations and provided the Company is eligible for the benefits of the Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended, or the Common Shares are readily tradable on a United States securities market, dividends paid by the Company to non-corporate U.S. Holders, including individuals, generally will be eligible for the preferential tax rates applicable to long-term capital gains for dividends, provided certain holding period and other conditions are satisfied, including that the Company not be classified as a PFIC in the tax

year of distribution or in the preceding tax year. The dividend rules are complex, and each U.S. Holder should consult its own tax advisor regarding the application of such rules.

#### Sale or Other Taxable Disposition of Common Shares and/or Warrant Shares

Upon the sale or other taxable disposition of Common Shares or Warrant Shares, a U.S. Holder generally will recognize capital gain or loss in an amount equal to the difference between (a) the amount of cash plus the fair market value of any property received and (b) such U.S. Holder's tax basis in such Common Shares or Warrant Shares sold or otherwise disposed of. Gain or loss recognized on such sale or other taxable disposition generally will be long-term capital gain or loss if, at the time of the sale or other taxable disposition, the Common Shares or Warrant Shares have been held for more than one year. Preferential tax rates may apply to long-term capital gain of a U.S. Holder that is an individual, estate, or trust. There are no preferential tax rates for long-term capital gain of a U.S. Holder that is a corporation. Deductions for capital losses are subject to significant limitations under the Code.

#### **Additional Tax Considerations**

##### Receipt of Foreign Currency

The amount of any distribution paid to a U.S. Holder in foreign currency or on the sale, exchange or other taxable disposition of Common Shares, Warrants or Warrant Shares generally will be equal to the U.S. dollar value of such foreign currency based on the exchange rate applicable on the date of receipt (regardless of whether such foreign currency is converted into U.S. dollars at that time). If the foreign currency received is not converted into U.S. dollars on the date of receipt, a U.S. Holder will have a tax basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Any U.S. Holder who receives payment in foreign currency and engages in a subsequent conversion or other disposition of the foreign currency may have a foreign currency exchange gain or loss that would be treated as ordinary income or loss, and generally will be U.S. source income or loss for foreign tax credit purposes. Different rules apply to U.S. Holders who use the accrual method of tax accounting. Each U.S. Holder should consult its own U.S. tax advisor regarding the U.S. federal income tax consequences of receiving, owning, and disposing of foreign currency.

##### Foreign Tax Credit

Subject to the PFIC rules discussed above, a U.S. Holder that pays (whether directly or through withholding) Canadian income tax with respect to dividends paid on the Common Shares or Warrant Shares (or with respect to any constructive dividend on the Warrants) generally will be entitled, at the election of such U.S. Holder, to receive either a deduction or a credit for such Canadian income tax paid. Generally, a credit will reduce a U.S. Holder's U.S. federal income tax liability on a dollar-for-dollar basis, whereas a deduction will reduce a U.S. Holder's income subject to U.S. federal income tax. This election is made on a year-by-year basis and applies to all foreign taxes paid or accrued (whether directly or through withholding) by a U.S. Holder during a year.

The foreign tax credit rules are complex and involve the application of rules that depend on a U.S. Holder's particular circumstances. Accordingly, each U.S. Holder should consult its own tax advisor regarding the foreign tax credit rules.

##### Information Reporting; Backup Withholding Tax

Under U.S. federal income tax laws certain categories of U.S. Holders must file information returns with respect to their investment in, or involvement in, a foreign corporation. For example, U.S. return disclosure obligations (and related penalties) are imposed on U.S. Holders that hold certain specified foreign financial assets in excess of certain threshold amounts. The definition of specified foreign financial assets includes not only financial accounts maintained in foreign financial institutions, but also, unless held in accounts maintained by a financial institution, any stock or security issued by a non-U.S. person. U.S. Holders may be subject to these reporting requirements unless their Common Shares, Warrants, and Warrant Shares are held in an account at certain financial institutions. Penalties for failure to file certain of these information returns are substantial. U.S. Holders should consult their

own tax advisors regarding the requirements of filing information returns, including the requirement to file IRS Form 8938.

Payments made within the U.S., or by a U.S. payor or U.S. middleman, of dividends on, and proceeds arising from the sale or other taxable disposition of the Common Shares, Warrants and Warrant Shares generally may be subject to information reporting and backup withholding tax, currently at the rate of 24%, if a U.S. Holder (a) fails to furnish its correct U.S. taxpayer identification number (generally on Form W-9), (b) furnishes an incorrect U.S. taxpayer identification number, (c) is notified by the IRS that such U.S. Holder has previously failed to properly report items subject to backup withholding tax, or (d) fails to certify, under penalty of perjury, that it has furnished its correct U.S. taxpayer identification number and that the IRS has not notified such U.S. Holder that it is subject to backup withholding tax. However, certain exempt persons, such as U.S. Holders that are corporations, generally are excluded from these information reporting and backup withholding tax rules. Any amounts withheld under the U.S. backup withholding tax rules will be allowed as a credit against a U.S. Holder's U.S. federal income tax liability, if any, or will be refunded, if such U.S. Holder furnishes required information to the IRS in a timely manner.

The discussion of reporting requirements set forth above is not intended to constitute a complete description of all reporting requirements that may apply to a U.S. Holder. A failure to satisfy certain reporting requirements may result in an extension of the time period during which the IRS can assess a tax and, under certain circumstances, such an extension may apply to assessments of amounts unrelated to any unsatisfied reporting requirement. Each U.S. Holder should consult its own tax advisors regarding the information reporting and backup withholding rules.

**THE ABOVE SUMMARY IS NOT INTENDED TO CONSTITUTE A COMPLETE ANALYSIS OF ALL TAX CONSIDERATIONS APPLICABLE TO U.S. HOLDERS WITH RESPECT TO THE ACQUISITION, OWNERSHIP, AND DISPOSITION OF UNITS, COMMON SHARES, WARRANTS AND WARRANT SHARES. U.S. HOLDERS SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX CONSIDERATIONS APPLICABLE TO THEM IN THEIR OWN PARTICULAR CIRCUMSTANCES.**

#### **TRANSFER AGENT AND REGISTRAR**

The transfer agent and registrar for the Common Shares in Canada is Computershare Investor Services Inc., at its principal office in Toronto, Ontario, Canada. The transfer agent and registrar for the Common Shares in the United States is Computershare Trust Company, N.A., at its principal office in Louisville, Kentucky.

#### **EXPERTS**

The Company's financial statements as at December 31, 2018 incorporated by reference in this short form prospectus have been audited by BDO Canada LLP, an independent registered public accounting firm, 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 the Offering and the validity of the securities offered by this short form prospectus are being passed upon for the Company by Borden Ladner Gervais LLP, Toronto, Ontario, the Company's Canadian counsel, and Dorsey & Whitney LLP, the Company's U.S. counsel, and on behalf of the Agent by Baker & McKenzie LLP.

As of the date hereof, 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 own, directly or indirectly, less than 1% of the Company's 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 both the original amount paid for such securities, as well as 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.

The Company and the Agent hereby confirm that purchasers who purchase Units under the Offering through the Company have the same rights and remedies for rescission and/or damages against the Company and the Agent, as the case may be, as purchasers who purchase Units under the Offering through the Agent.

**CERTIFICATE OF THE COMPANY**

Dated: October 15, 2019

This amended and restated preliminary 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 amended and restated preliminary 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) "*Charles Federico*"

Director

(SIGNED) "*John Barker*"

Director

**CERTIFICATE OF THE AGENT**

Dated: October 15, 2019

To the best of our knowledge, information and belief, this amended and restated preliminary 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 amended and restated preliminary 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