UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For fiscal year ended December 31, 2019

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

OR

☐ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report:

Commission file number 001-38524

Titan Medical Inc.
(Exact name of Registrant as specified in its charter)

Ontario, Canada
(Jurisdiction of incorporation or organization)

155 University Avenue, Suite 750
Toronto, Ontario M5H 3B7
Canada
(416) 548-7522
(Address of principal executive offices)

Stephen Randall
Titan Medical Inc.
155 University Avenue, Suite 750
Toronto, Ontario M5H 3B7
Canada
Tel: (416) 548-7522
(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, no par value	TMDI	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: **As at December 31, 2019, 39,907,681 Common Shares of the Registrant were issued and outstanding.**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☐ No ☒

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer, "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ Emerging growth company ☒

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act. ☐

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐ International Financial Reporting Standards as issued by the International Accounting Standards Board ☒ Other ☐

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:

Item 17 ☐ Item 18 ☐

If this is an annual report, indicate by check mark whether the Registrant is a shell company (as defined in Rule12b-2 of the Exchange Act).

Yes ☐ No ☒

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INTRODUCTION

In this annual report on Form 20-F, which we refer to as the "Annual Report", except as otherwise indicated or as the context otherwise requires, the "Company", "we", "our" or "us" or "Titan" or the "Company" refers to Titan Medical Inc. The Company is a "foreign private issuer" as defined in Rule 3b-4 under the Exchange Act and Rule 405 under the Securities Act of 1933, as amended. Equity securities of the Company are accordingly exempt from Sections 14(a), 14(b), 14(c), 14(f) and 16 of the Exchange Act pursuant to Rule 3a12-3 thereunder.

CURRENCY

Unless otherwise indicated, all dollar amounts in this Annual Report are in United States dollars. The exchange rate of Canadian dollars into United States dollars, on December 31, 2019 based upon the daily closing exchange rate as quoted by Capital IQ – the research division of Standard and Poor's was U.S.$1.00 = Cdn.$1.2994.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report contains "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 Annual Report 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", "expected", "expectation", "anticipates", "believes", "intends", "estimates", "predicts", "continues", "potential", "projects", "projection", "targeted", "plans", "possible", "milestones", "objectives" 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 Annual Report 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 ability to raise sufficient financing on a timely basis, secure and restore relationships with its suppliers and development partners and retain qualified personnel;
- the Company's business plan consists of the development of computer-assisted robotic surgical technologies for application in MIS comprising its single-port robotic surgical system;
- the Company is planning continued development of a robust training curriculum and post-training assessment tools for surgeons and surgical teams;
- the proposed training curriculum is planned to include cognitivepre-training, psychomotor skills training, surgery simulations, live animal and human cadaver lab training, surgical team training, troubleshooting and an overview of safety;
- post-training assessment will include validation of the effectiveness of those assessment tools;
- the Company's intent to initially pursue gynecologic surgical indications for use of its single-port robotic surgical system;
- the single-port robotic surgical system patient cart is being developed to deliver multi-articulating instruments and a 3D high definition vision system into the patient's body cavity through a single access port;
- the Company's technology and research and development objectives and milestones, including any estimated costs, schedules for completion and probability of success and including without limitation the table set forth herein under the heading, "Current Development Plan" and the footnotes thereunder;
- 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 submitting its Investigational Device Exemption ("IDE") application to the U.S. Food and Drug Administration ("FDA") in a timely manner;
- the Company's expectation that under the FDA guidelines, the surgical system will be classified as a Class II medical device;

- the Company's expectation that it can, in a timely manner, produce the appropriate preclinical and clinical data required for a 510(k) application to the FDA, and Technical File for the CE mark;
- assuming the Company obtains regulatory clearances, the Company's expectation with respect to launching a commercial product in certain jurisdictions;
- the Company's plans to develop its single-port robotic surgical system and the estimated incremental costs (including the status, cost and timing of achieving the development and regulatory milestones disclosed herein);
- the Company's plans to design, create and refine software for production system functionality of the single-port robotic surgical system and the estimated incremental costs (including the status, cost and timing of achieving the development milestones disclosed herein);
- the indication of additional specific milestones as the development of the Company's single-port robotic surgical system progresses;
- assuming the Company obtains regulatory clearances, the Company's intentions with respect to initiating marketing activities;
- the Company's intention to continue to assess specialized skill and knowledge requirements and recruitment of qualified personnel and partners;
- the Company's intended use of proceeds of any offering of securities;
- the Company's continuing efforts to secure its intellectual property by filing patent applications;
- the Company's expectations with respect to its relationship with its Primary Supplier (as defined herein), including its ability to comply with the terms of the October 3, 2019 letter agreement between the Company and the Primary Supplier;
- the future success of the Company is substantially dependent on funding its research and development program and maintaining the support of its research and development and manufacturing service providers and, in some cases, securing new suppliers and service providers;
- the mandate of the special committee of the Company's board of directors includes a wide range of potential transactions, including financing through equity or debt, licensing, merger or acquisition and to oversee the global search for strategic alternative transactions to maximize shareholder value;
- although the outcome of the Civil Claim cannot be predicted, at a minimum, the Company does not expect that it will be responsible for the amounts set out in the Civil Claim beyond invoices for June through September 2019;
- should the Company be successful in raising sufficient capital, which it may not be, the Company plans to complete paying valid past due invoices and then develop a work plan with input from suppliers that is consistent with the Company's priorities toward milestone achievement having regard to the Company's available capital resources;
- as the Company's Primary Supplier has agreed to waive certain deposit requirements, the Company plans to comply with the specified interim requirements of the supplier until the Company has raised sufficient capital to fund the deposit as described above;
- the Company's expectations with respect to the outcome of its dispute with the Service Provider (as defined herein);
- in any case in which the Company may be unable to normalize supplier relationships, it has identified alternative suppliers of those services;
- the Company will need to replace any product development service provider in the event it should be necessary or desirable to the Company;
- the performance of human surgeries with the single-port robotic surgical system will require an IDE from the FDA, which must be submitted and approved in advance;
- the recruitment of surgeons from multiple hospital sites will be necessary to perform the surgeries. Each of these sites will require approval of their independent Institutional Review Board ("IRB") to approve the studies;
- 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 robotic surgical system;
- insights gained from these preclinical studies have directed the Company to make further product improvements;
- the Company entered into a second Common Share Purchase Agreement ("Second Aspire Agreement") with Aspire Capital Fund, LLC ("Aspire Capital") under which Aspire Capital committed to purchase up to US $35.0 million of common shares of Titan at the Company's request from time to time;

- the Company's intentions to complete summative human factors studies and complete the design and development of the system and initiate clinical studies;
- the surgical indications for, and the benefits of, the robotic surgical system;
- 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 scope of protection obtained, if any, from the Company's current or future patent applications, as well as their expected competitive advantages;
- the Company's seeking of licensing opportunities to expand its intellectual property portfolio;
- obtaining or maintaining trademark registrations for the marks and names the Company uses in one or more countries and the future use of such marks and names;
- the Company's expected market segments and principal markets;
- the Company's expectations that they may be a PFIC (as defined herein) for the tax year ending December 31, 2020 and may be a PFIC in future tax years;
- the Company's expectation that negative cash flow is expected to continue;
- the Company's expectation that the Common Shares should be "regularly traded" in the first calendar quarter of 2020;
- the Company's intention to vigorously defend itself and pursue all relief to which it is entitled related to the work done by Naglreiter;
- 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; and
- the estimated size of the market for robotic surgical systems;

Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Forward-looking statements are statements about the future and are inherently uncertain, and actual results of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, such as:

- dependency on additional financing;
- the Company's history of losses;
- reliance on strategic alliances;
- the ability to retain key personnel in a highly competitive employment environment;
- the possibility of the Company's inability to augment its management team when required;
- the possibility that the Company's trade secrets and confidential information may be compromised;
- reliance on third parties for important aspects of the Company's business;
- industry competitiveness;
- operating without infringement of intellectual property rights of others;
- obtaining and enforcing patent protection for the Company's products;
- obtaining or maintaining our trademarks;

- conflicts of interest;
- fluctuating financial results;
- rapidly changing markets;
- introduction of more technologically advanced products by competitors;
- potential product liability claims;
- ability to license other intellectual property rights;
- government regulation;
- modifications to products requiring new regulatory clearance;
- extensive post-market regulation;
- the Company's products causing or contributing to a death or serious injury;
- recalls by governmental authorities;
- compliance with accounting regulations and tax rules across multiple jurisdictions;
- contingent liabilities;
- sales cycle for our single-port robotic surgical system;
- uncertainty as to product development and commercialization milestones;
- uncertainties as to development and manufacturing of a commercially viable product;
- manufacturing delays, interruptions and cost overruns;
- reliance on external suppliers and development firms;
- delays, liability and negative perceptions from product malfunction;
- instruments, components and accessories require repeated cleaning and sterilization;
- a Civil Claim and other commercial disputes;
- additional regulatory burden and controls over financial reporting;
- fluctuations in foreign currency;
- the possibility that the Company is not able to maintain its "foreign private issuer" status, and the possibility of delisting from the Nasdaq or TSX exchanges;
- reduced disclosure requirements applicable to "emerging growth companies";
- the likelihood that the Company is a "passive foreign investment company";
- cyber-security risks and threats;
- adverse impact on the Company's financial condition and results of operations for fiscal 2020 as a result ofCOVID-19;
- current global financial conditions;
- results of operations;
- difficulties with forecasting future operating results;
- profitability;
- obligations as a public company;
- stock price volatility;
- possible future sales by the Company's shareholders of their securities;
- limited operating history of the Company;
- the negative impact of COVID-19 on the ability of suppliers of goods and services to provide resources in a timely manner to support the Company's milestones;
- the negative impact of COVID-19 on present and future demand for robotic surgeries, equipment and supplies; and
- the negative impact of COVID-19 on the ability of the Company to obtain regulatory approvals as required on a timely basis to accomplish its milestones and objectives.

Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein. This list is not exhaustive of the factors that may affect any of our forward-looking statements. Forward-looking statements are statements about the future and are inherently uncertain, and our actual achievements 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 without limitation, those referred to in this document under the heading "Risk Factors." The forward-looking statements in this Annual Report are based on the reasonable beliefs, expectations and opinions of management on the date the forward-looking statements are made, and, except as required by law, we do not assume any obligation to update forward-looking statements if circumstances or our management's beliefs, expectations or opinions should change.

For the reasons set forth above, investors should not attribute undue certainty to or place undue reliance on forward-looking statements.

PART I.

Item 1. Identity of Directors, Senior Management and Advisers

Not Applicable.

Item 2. Offer Statistics and Expected Timetable

Not Applicable.

Item 3. Key Information

A. Selected Financial Data

The following tables summarize financial data as at and for the fiscal years ended December 31, 2019, 2018, 2017 and 2016, prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB. The financial information in the tables below as at and for the fiscal year ended December 31, 2019, 2018, 2017 and 2016 has been derived from our audited financial statements and related notes included in this Annual Report. The selected financial data below should be read in conjunction with our audited financial statements, the notes thereto and the information appearing in the section of this Annual Report entitled "*Item 5 – Operating and Financial Review and Prospects*". Our historical results do not necessarily indicate results expected for any future period.

	Year ended December 31,			
Consolidated statement of loss and comprehensive loss data	**2019**	**2018**	**2017**	**2016**
Net sales	$ —	$ —	$ —	$ —
Net and comprehensive loss for the year	41,907,079	22,639,272	33,586,984	23,323,496
Basic and diluted loss per common share(1)	1.37	1.36	4.25	4.80

Consolidated statement of financial position date	**2019**	**2018**	**2017**	**2016**
Total assets	$ 3,381,581	$ 21,915,164	$ 29,674,610	$ 7,192,496
Net assets	(11,681,831)	4,217,109	9,606,798	594,604
Capital stock – common	194,859,415	170,502,394	154,016,519	112,742,810
Number of common shares issued(1)	39,907,681	21,675,849	12,686,723	5,550,382

Notes:

(1) After giving effect to a 30:1 share consolidation that took effect June 10, 2018 in connection with the Company listing its shares on the NASDAQ Capital Markets exchange.

B. Capitalization and Indebtedness

Not Applicable.

C. Reasons for the Offer and Use of Proceeds

Not Applicable.

D. Risk Factors

In addition to the other information presented in this Annual Report, the following should be considered carefully in evaluating us and our business. This Annual Report contains forward-looking statements that involve risk and uncertainties. Our actual results may differ materially from the results discussed in the forward-looking statements. 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. Factors that might cause such a difference include, but are not limited to, those discussed below and elsewhere in this Annual Report.

We will require additional financing which may not be available to us on acceptable terms, or at all.

We will require additional financing in order to continue our research and development program through to completion and take advantage of future opportunities. Our ability to arrange such financing in the future will depend in part upon prevailing capital market conditions, as well as upon our business success. There can be no assurance that we will be successful in our efforts to arrange additional financing on terms satisfactory to us. If additional financing is raised by the issuance of shares or convertible securities from treasury, our control may change and shareholders may suffer additional dilution. If additional funds are raised through strategic partnerships, we may be required to relinquish rights to our products, or to grant licenses on terms that are not favorable to us. If adequate funds are not available, or are not available on acceptable terms, we may not be able to take advantage of opportunities, or otherwise respond to competitive pressures, which may delay or reduce our operations and ability to remain in business and continue as a going concern.

We have a history of losses and there is no guarantee that we will be able to achieve profitability.

We have a history of losses, and there is no assurance that any of our contemplated products will generate sustainable revenues or earnings, be profitable or provide a return on investment in the future. We have not paid dividends in the past. Our directors will determine our future dividend policy if we generate earnings in the future, based on operational and financial circumstances at that time.

We had negative cash flow from operating activities for our fiscal year ended December 31, 2019 and this negative cash flow is expected to continue. We will continue to incur research and development and general and administrative expenses related to our operations. We expect to incur sales and marketing expenses in anticipation of the commercialization of the single-port robotic surgical system if and when FDA clearance and CE marking provides authorization for commercial activities in the corresponding jurisdictions. If the single-port robotic surgical system fails in development or does not gain regulatory clearance or approval, or if it does not achieve market acceptance, we may never generate revenue or free cash flow or become profitable. Even if we generate revenue or free cash flow or achieve profitability in the future, we may not be able to sustain revenues, free cash flow or profitability in subsequent periods.

The medical device industry requires significant financial resources, and there is no assurance that future revenues will be sufficient to generate the funds required to continue our business development and marketing activities. If we do not have sufficient capital to fund our operations, we may be required to reduce our research and development efforts or in the future reduce our marketing efforts or forego certain business opportunities.

We rely on strategic alliances and there can be no assurance that these alliances will achieve their goals.

We rely upon, and expect to rely upon, strategic alliances with original equipment manufacturers (if and when our technology is commercialized) and medical technology development firms for development contracts, assistance in product design and development, volume purchase orders and manufacturing and marketing expertise. There can be no assurance that the strategic alliances will achieve their goals.

We depend on key personnel and the loss of the service of such personnel could have a negative impact on our business.

Our future success and performance depend in part upon the experience of key members of management. If, for any reason, any one or more of such key personnel do not continue to be active in our management, our operations and business prospects could be adversely affected. In particular, the losses of the services of any of our senior management or other key employees integral to the development of our technology and the generation of a functional, commercially viable product, or the inability to attract and retain necessary technical personnel in the future, could have a material adverse effect upon our business, financial condition, prospects, operating results and cash flows. We do not currently maintain “key man” insurance for any senior management or other key personnel.

We expect to increase the size of our management team in the future and our failure to attract and retain new members of our management team could adversely affect our business.

We expect that our potential expansion into areas and activities requiring additional expertise, such as manufacturing, sales, marketing and distribution will place additional requirements on our management, operational and financial resources. We expect these demands will require an increase in management and engineering, medical sales, marketing, and technical personnel and the development of additional expertise by existing management personnel. There is currently aggressive competition for employees who have experience in technology engineering, and in particular, surgical robotics. The failure to attract and retain such personnel or to develop such expertise could materially adversely affect our business, financial condition and results of operations.

Our trade secrets or other confidential information may be compromised.

We rely on trade secrets and confidential information, which we seek to protect, in part, through confidentiality andnon-disclosure agreements with our employees, collaborators, suppliers, and other parties. There can be no assurance that these agreements will not be breached, that we would have adequate remedies for any such breach or that our trade secrets and confidential information will not otherwise become known to or independently developed by competitors. We might be involved from time to time in litigation to determine the enforceability, scope and validity of our proprietary rights. Any such litigation could result in substantial cost and divert management's attention from operations.

We rely on third parties for a number of important aspects of our business and there are a range of issues that are outside of our direct control.

We are and will continue to be dependent on third parties to conduct our preclinical and clinical studies and to provide services for certain important aspects of our business. If these third parties do not perform as contractually required or expected, we may not be able to obtain regulatory clearance for our products, or we may be delayed in doing so.

We rely on third parties, such as technology design and development firms, contract research organizations, medical institutions, academic institutions, independent clinical investigators and contract laboratories, to conduct technology development, preclinical testing and feasibility studies, and clinical studies, and we expect to continue to do so in the future. We rely heavily on these parties, but do not control many aspects of their activities. As a result, many important aspects of product development are outside our direct control. If the third parties conducting preclinical or clinical studies do not perform their contractual duties or obligations, do not meet expected patient recruitment or other deadlines, fail to comply with good laboratory practice regulations, do not adhere to protocols or otherwise fail to generate reliable data, development, approval and commercialization of our products may be extended, delayed or terminated or may need to be repeated, and we may not be able to obtain regulatory clearance.

Our industry is highly competitive and a number of our competitors have significantly greater financial and human resources than we do.

The robotic surgical market is highly competitive with respect to, among other factors: pricing, product and service quality, and the time required to introduce new products and services. Our market is dominated by larger and better capitalized companies with substantially greater resources than we have. New products may be slow to be accepted into the market or may not be accepted at all. We are constantly exposed to the risk that our competitors may implement new technology before we do, or may offer lower prices, additional products or services or other incentives that we cannot and will not offer. We can give no assurances that we will be able to compete successfully against existing or future competitors. Competition in our target market is intense, and we expect competition to increase. The market for robotic surgery technologies is susceptible to price reductions among competitors seeking relationships with the same hospitals and outpatient surgery centers to which we hope to sell our products.

Our ability to compete successfully depends on a number of factors, including:

- the successful development of our first-generation product in a form that is competitive in features, performance and price;
- the successful identification and development of new products for our core market;
- our ability to anticipate customer and market requirements and changes in technology and industry standards in a timely manner;
- our ability to gain access to and use technologies in a cost-effective manner;
- our ability to introduce cost-effective new products in a timely manner;
- our ability to differentiate our products from our competitors' offerings;
- our ability to gain customer acceptance of our products;
- the performance of our products relative to our competitors' products;
- our ability to market and sell our products through effective sales channels;
- our ability to establish and maintain effective internal financial and accounting controls and procedures;
- our ability to obtain required regulatory clearances and approvals in a timely manner;
- the protection of our intellectual property, including our processes, trade secrets andknow-how; and
- our ability to attract and retain qualified technical, executive and sales personnel.

Our commercial success depends significantly on our ability to operate without infringing the patents and other proprietary rights of third parties.

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

Litigation before the courts of jurisdictions, or proceedings before patent offices, may be necessary to determine the scope, enforceability and validity of third-party proprietary rights and our proprietary rights. Some of our competitors have, or are affiliated with companies having, substantially greater resources than us and these competitors may be able to sustain the costs of complex intellectual property litigation and proceedings to a greater degree and for a longer period of time than us. Regardless of their merit, any claims relating to intellectual property scope, enforceability, validity, or infringement could be time consuming to evaluate and defend, result in costly litigation, cause product shipment delays or stoppages, divert management's attention and focus away from the business, subject us to significant liabilities and equitable remedies, including injunctions, require us to enter into costly royalty or licensing agreements and/or require us to modify or stop developing or commercializing certain technologies and products unless we obtain licenses from a third parties. There can be no assurance that we would be able to obtain any such licenses on commercially favorable terms or at all. If we do not obtain such licenses, we could be required to cease the development and sale of certain of our products.

If we are unable to obtain and enforce patent protection for our products, our business could be materially harmed.

There is no guarantee that the patent applications owned by us will be granted, or, even if allowed to grant, that the patent applications will be granted in their current form or granted with a scope of protection sufficient to protect our commercially valuable technology. The scope of protection, if any, that may be afforded by our patent applications is uncertain. Further, even if patents issue from our pending or future applications, those issued patents and any of our previously assigned patents may be invalid or have a narrower scope of protection, and may be subject to invalidation proceedings commenced by third parties. The validity of an issued patent may be attacked on a number of different grounds, and such invalidation proceedings are inherently unpredictable. If such an invalidation proceeding commenced by a third party in respect of an issued patent owned by us is successful, the subject patent will be ordered invalid and therefore unenforceable.

Our success will depend, in part, on our ability to obtain and maintain protection over our technology and products and not infringe the proprietary rights of third parties. Despite precautions, it may be possible for a third party to copy or otherwise obtain and use our technology without authorization. There can be no assurance that any steps taken by us will prevent misappropriation of our technology. Litigation could result in substantial costs and diversion of resources and could have a material adverse effect on our business, operating results and/or financial condition.

We may be unable to obtain or maintain our trademarks and may incur substantial costs attempting to defend and enforce our rights in this regard.

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

Certain of our directors and officers also serve as directors and officers of other companies, creating the possibility that a conflict of interest could arise.

Certain of our directors, officers and advisors are also directors, officers, advisors or shareholders of other companies. Such associations may give rise to conflicts of interest from time to time. Our directors will be required by law to act honestly and in good faith with a view to our best interests and to disclose any interest which they may have in any of our projects or opportunities. If a conflict arises at a meeting of our board of directors, any director with a conflict is obligated to disclose their interest and abstain from voting on such matter. In determining whether or not we will participate in any project or opportunity, the director in potential conflict would be required to recuse themselves from voting on the matter, and then the other non-conflicted members of the board will consider the merit of the opportunity and the degree of risk to which we may be exposed, along with our financial position at that time.

Our financial results and results of operations have fluctuated in the past and may continue to be volatile going forward.

Our financial results may vary significantly from period to period depending on the level of development activities and the size, frequency and timing of our securities offerings. The financial results may fluctuate as a result of a number of factors that may be outside of our control, which may cause the market price of our common shares to fall. For these reasons, comparing our operating results on a period-to-period basis may not be meaningful, and an investor should not rely on past results as an indication of future performance. Financial results may be negatively affected by any of the risk factors listed in this "*Risk Factors*" section.

Our results of operations will depend upon numerous factors, including:

- the successful development and commercialization of the single-port robotic surgical system in a timely manner and in accordance with budgeted expenditures;
- actions relating to regulatory matters;
- timing and ability to develop manufacturing and sales and marketing capabilities;
- demand for robotic surgical systems in general;
- the extent to which our products gain market acceptance;
- the progress of surgical training in the use of products;
- ability to develop, introduce and market new or enhanced versions of our products on a timely basis;
- product quality problems or alleged product quality problems;
- ability to protect proprietary rights and defend against third party challenges; and
- ability to license additional intellectual property rights as required.

We are targeting a new and rapidly changing market. It is not clear that surgeons or hospitals will choose our surgical system over those offered by our competitors.

The market for our proposed technology is relatively new and is likely to undergo substantial development and changes. The market for our technology may develop more slowly than we anticipate, in which case we may be unable to recover the losses we have incurred in the development of our technology and may never achieve profitability. We cannot guarantee that this market will develop as anticipated or that we will secure market share necessary to achieve profitability and growth.

There is no assurance that surgeons or hospitals will choose our surgical system (if and when it is commercialized) over the systems offered by our competitors. There is also no assurance that robotic surgical systems will continue to be used (or their use increased) by potential customers and that robotic surgical technology will be competitive (based on costs and performance factors) with, and preferred over, conventional and well established medical treatment and surgical methods including conventional minimally invasive surgery and open surgery.

The introduction of more technologically advanced products could impact our operating and financial results.

Existing competitors could advance their products and new competitors could enter the market with superior technology. New and competitive products introduced into the marketplace that are based on or incorporate more advanced technologies, or provide performance similar to our products at a lower cost, may impact our operating and financial results.

We may become subject to potential product liability claims, and we may be required to pay damages that exceed our insurance coverage.

Our business is subject to a number of risks and hazards including adverse conditions or changes in the regulatory environment. Such occurrences could result in damage to equipment, personal injury or death, monetary losses and possible legal liability. Despite any insurance coverage which we currently have or may secure in the future, the nature of these risks is such that liabilities might exceed policy limits, the liabilities and hazards might not be insurable, or we may elect not to insure against such liabilities due to high premium costs or other reasons, in which event we could incur significant costs that could have a materially adverse effect upon our financial position.

Our business exposes us to potential product liability claims that are inherent in the design, testing, manufacture, sale and distribution of our surgical system which we are seeking to introduce to the market. Surgical medical devices involve significant risks of serious complications, including bleeding, nerve injury, paralysis, infection, and even death. Any product liability claim brought against us, with or without merit, could result in the increase of our product liability insurance rates or in our inability to secure coverage in the future on commercially reasonable terms, if at all. In addition, if our product liability insurance proves to be inadequate to pay a damage award, we may have to pay the excess of this award out of our cash reserves, which could significantly harm our financial condition. If longer-term patient results and experience indicate that our products or any component of a product causes tissue damage, motor impairment or other adverse effects, we could be subject to significant liability. A product liability claim, even one without merit, could harm our reputation in the industry, lead to significant legal fees, and result in the diversion of management's attention from managing our business.

Our technology may depend on third party licenses for certain functions or procedures. There can be no guarantee that we will be able to secure and maintain those licenses.

Our technology may require the use of other existing technologies and processes which are currently, or in the future will be, subject to patents, copyrights, trademarks, trade secrets and/or other intellectual property rights held by other parties. We may need to obtain one or more licenses to use those other existing technologies. If we are unable to obtain licenses on reasonable commercial terms from the holders of such intellectual property rights, we could be required to halt development and manufacturing or redesign our technology, failing which we could bear a substantial risk of litigation for infringement or misappropriation of such intellectual property rights. In any such event, our business and operations could be materially adversely affected.

Government regulation controls all aspects of our product and business. Changes in policies and additional regulations may be enacted that could prevent or delay regulatory clearance or approval of our products.

The preclinical and clinical testing, manufacturing, sale and distribution of our contemplated products are governed by a number of regulatory bodies in countries where we intend to conduct business, including required clearance to market from the FDA, European CE mark approval, and approval from the Canadian Health Protection Branch. Applications for these approvals and clearances have not been made and there can be no assurances that applications for such approvals and clearances will be filed in a timely manner as planned, or will be received, or will be granted approval or clearance, or if such approvals and clearances are granted, that we will be able to comply with the conditions and requirements of such approvals and clearances. Failure to obtain such approvals and clearances or to comply with such conditions and requirements may have a material adverse effect on our business, financial condition and results of operations.

Regulatory authorities can delay, limit or deny clearance or approval of a medical device candidate for many reasons, including:

- a medical device candidate may not be deemed safe or effective, in the case of a PMA application;
- a medical device candidate may not be deemed to be substantially equivalent to a device lawfully marketed either as a grandfathered device or one that was cleared through the 510(k) premarket notification process;
- a medical device candidate may not be deemed to be in conformance with applicable standards and regulations;
- regulatory officials may not find the data from preclinical and clinical studies sufficient;
- regulatory authorities might not approve our processes or facilities or those of any of our third-party manufacturers; or
- regulatory authorities may change clearance or approval policies or adopt new regulations.

Regulatory requirements and standards for approval or clearance of medical devices are subject to change and the adaptation of our technology development program to meet the changing requirements and standards may cause us to incur substantial expenditures and may result in substantial delays in the achievement of and changes to the technology development milestones as well as escalations in the corresponding budgets. Such changes may require the performance and collection of extensive human clinical studies and data which could add significant expense and substantially lengthen timelines to commercialization. These changes may have an adverse effect on our ability to commercialize our products and our results of operations and financial condition.

Our results may be affected by changes in trade, monetary and fiscal policies, laws and regulations, or other activities of the Canadian, United States and foreign governments, agencies and similar organizations. Our results may be affected by social and economic conditions which impact our operations.

Once our products are cleared or approved, modifications to our products may require new regulatory clearances or approvals and may require us to cease marketing or recall the modified products until clearances or approvals are obtained.

If we are granted FDA clearance, we may subsequently decide to make certain modifications to our products for a number of reasons including those based on customer feedback.

Any modification to a 510(k)-cleared device that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, design, or manufacture, requires a new 510(k) clearance. The FDA requires every manufacturer to make this determination in the first instance, but the FDA may review such determinations. The FDA may not agree with our decisions regarding whether new clearances or approvals are necessary. If the FDA disagrees with our determinations for any future changes, or prior changes to previously marketed products, as the case may be, we may be required to cease marketing or to recall the modified products until we obtain clearance or approval, and we may be subject to significant regulatory fines or penalties.

Furthermore, the FDA's ongoing review of the 510(k) program may make it more difficult for us to make modifications to our products, either by imposing more strict requirements on when a new 510(k) for a modification to a previously cleared product must be submitted, or applying more onerous review criteria to such submissions. In October 2017, the FDA issued guidance documents addressing when to submit a new 510(k) due to modifications to 510(k) cleared products and the criteria for evaluating substantial equivalence. The interpretation of the guidance document by the FDA staff could lead to instances where the FDA disagrees with our decision regarding a change and could result in warning letters and other enforcement actions.

Even after clearance or approval for our products is obtained, we are subject to extensive post-market regulation by the FDA and other regulatory authorities. Our failure to meet strict regulatory requirements could require us to pay fines, incur other costs or even close our facilities.

Even after we have obtained the proper regulatory clearance or approval to market a product, the FDA has the power to require us to conduct post-market studies. These studies can be expensive and time-consuming to conduct. Failure to complete such studies in a timely manner could result in the revocation of clearance or approval and the recall or withdrawal of the product, which could prevent us from generating sales from that product in the United States. The FDA has broad enforcement powers, and any regulatory enforcement actions or inquiries, or other increased scrutiny on us, could dissuade surgeons from using our products and adversely affect our reputation and the perceived safety and efficacy of our products.

We are also required to comply with the FDA's QSR (Quality System Regulation/Medical Device Good Manufacturing Practice), which covers the methods used in, and the facilities and controls used for, the design, manufacture, quality assurance, labeling, packaging, sterilization, storage, shipping, installation and servicing of our marketed products. The FDA enforces the QSR through periodic announced and unannounced inspections of manufacturing facilities. In addition, in the future, regulatory authorities and/or customers may require specific packaging of sterile products, which could increase our costs and the price of our products. Later discovery of previously unknown problems with our products, including unanticipated adverse events or adverse events of unanticipated severity or frequency, manufacturing problems, or failure to comply with regulatory requirements such as the QSR, may result in changes to labeling, restrictions on such products or manufacturing processes, withdrawal of the products from the market, voluntary or mandatory recalls, a requirement to repair, replace or refund the cost of any medical device we manufacture or distribute, fines, suspension of regulatory approvals, product seizures, injunctions or the imposition of civil or criminal penalties which would adversely affect our business, operating results and prospects.

If one of our products, or a malfunction of one of our products, causes or contributes to a death or a serious injury, we will be subject to medical device reporting regulations, which can result in voluntary corrective actions or agency enforcement actions.

Under the FDA's medical device reporting, or MDR (Medical Device Reporting), regulations, we are required to report to the FDA any incident in which our product may have caused or contributed to a death or serious injury or in which our product malfunctioned and, if the malfunction were to recur, would likely cause or contribute to death or serious injury. Product malfunctions may result in a voluntary or involuntary product recall, which could divert managerial and financial resources, impair our ability to manufacture our products in a cost-effective and timely manner, and have an adverse effect on our reputation, results of operations and financial condition. We are also required to follow detailed recordkeeping requirements for all firm-initiated medical device corrections and removals, and to report such corrective and removal actions to the FDA if they are carried out in response to a risk to health and have not otherwise been reported under the MDR regulations.

All manufacturers bringing medical devices to market in the European Economic Area are legally bound to report any incident that led or might have led to the death or serious deterioration in the state of health of a patient, user or other person, and which the manufacturer's device is suspected to have caused, to the competent authority in whose jurisdiction the incident occurred. In such case, the manufacturer must file an initial report with the relevant competent authority, which would be followed by further evaluation or investigation of the incident and a final report indicating whether further action is required. Any adverse event involving our products could result in future voluntary corrective actions, such as recalls or customer notifications, or agency action, such as inspection or enforcement action. Any corrective action, whether voluntary or involuntary, will require the dedication of our time and capital, distract management from operating our business and may harm our reputation and financial results.

A recall of our products, either voluntarily or at the direction of the FDA or another governmental authority, or the discovery of serious safety issues with our products, could have a significant adverse impact on us.

The FDA and similar foreign governmental authorities such as the competent authorities of the European Economic Area countries have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design or manufacture or in the event that a product poses an unacceptable risk to health. Manufacturers may, under their own initiative, recall a product if any material deficiency in a device is found. A government-mandated or voluntary recall by us or one of our distributors could occur as a result of an unacceptable risk to health, component failures, manufacturing errors, design or labeling defects or other deficiencies and issues.

Any future recalls of any of our products would divert managerial and financial resources and could have an adverse effect on our reputation, results of operations and financial condition, which could impair our ability to produce our products in a cost-effective and timely manner in order to meet our customers' demands. We may also be required to bear other costs or take other actions that may have a negative impact on our future sales and our ability to generate profits.

Compliance with accounting regulations and tax rules across multiple jurisdictions is time consuming and expensive and could expose us to penalties and fines.

We are subject to numerous tax and accounting requirements, and changes in existing accounting or taxation rules or practices, or varying interpretations of current rules or practices, could have a significant adverse effect on our financial results or the manner in which we conduct our business. We have issued our financial statements for the year ended December 31, 2019 in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

In the future, the geographic scope of our business may expand, and such expansion will require us to comply with the tax laws and regulations of multiple jurisdictions. Requirements as to taxation vary substantially among jurisdictions. Complying with the tax laws of these jurisdictions can be time consuming and expensive and could potentially subject us to penalties and fees in the future if we were to inadvertently fail to comply. In the event we were to inadvertently fail to comply with applicable tax laws, this could have a material adverse effect on our business, results of operations, and financial condition.

Contingent liabilities could have a negative impact on our financial position.

Contingent liabilities for contractual and other claims with customers, development firms, suppliers and former employees to which we may become party in the future may have a material adverse effect on our financial position.

The sales cycle for our single-port robotic surgical system is expected to be long and unpredictable, which will make it difficult for us to forecast revenue and it may increase the magnitude of quarterly fluctuations in our operating results.

The purchase of a surgical robotic system such as our single-port robotic surgical system represents a capital purchase by hospitals and other potential customers. The capital purchase nature of the transaction, the complexity of our product, the relative newness of surgical robotic systems and the competitive landscape requires us to spend substantial time and effort to assist potential customers and any group purchasing organizations in evaluating our robotic system. We must communicate with multiple surgeons, administrative staff and executives within each potential customer account in order to receive all approvals on behalf of such organizations. We may face difficulty identifying and establishing contact with such decision makers. Even after initial acceptance, the negotiation and documentation processes can be lengthy. Additionally, our customers may have strict limitations on spending depending on the current economic climate or trends in healthcare.

Any delay in achieving sales in a particular quarter could cause our operating results to fall below expectations. We also expect such a lengthy sales cycle makes it more difficult for us to accurately forecast revenues in future periods and may cause revenues and operating results to vary significantly in future periods.

We currently have very limited marketing, sales and distribution capabilities. There can be no assurance that we will be successful in building our sales capabilities. To the extent that we enter into distribution, co-promotion or other arrangements, our product revenue is likely to be lower than if we directly market or sell our products. In addition, any revenue we receive will depend in whole or in part on the efforts of such third parties, which may not be successful and are generally not within our control. If we are unable to enter into such arrangements on acceptable terms or at all, we may not be able to successfully commercialize our products.

There can be no certainty that we will meet our established product development and commercialization milestones. Failure to do so may affect our operational and financial results.

We have established product development and commercialization milestones that we use to assess our progress toward developing a commercially viable product. These milestones relate to technology and design improvements as well as to dates for achieving development goals and projected expenditures. To assess progress, we test and evaluate our technology under simulated conditions. If such evaluations indicate technical defects or failure to meet cost or performance goals, our commercialization schedule could be delayed, and potential purchasers of our initial commercial systems may decline to purchase them or they may choose to purchase alternative technologies. Whether or not we meet our milestones, there is no assurance that our technology will be successful in the market. We expect that additional specific milestones could be identified as the development of our single-port robotic surgical system progresses, or existing milestones, budgets and the schedule for completion of each milestone may change depending on a number of factors including the results of our development program, the availability of financing and the ability of development firms engaged by us to complete work assigned to them.

We are still in the process of developing our single-port robotic surgical system and there can be no certainty that a commercially viable product will emerge from this process.

Our future success is substantially dependent on a continued research and development effort that has thus far been directed by certain of our key managers. In addition to being capital intensive, research and development activities relating to sophisticated technologies such as ours are inherently uncertain as to future success and the achievement of a desired result. If delays or problems occur during our ongoing research and development process, important financial and human resources may need to be diverted toward resolving such delays or problems. Further, there is a material risk that our research and development activities may not result in a functional, commercially viable product or one that is approved by regulatory authorities.

Commercial manufacturing of our single-port robotic surgical system is expected to be an extremely detailed and complex process with the potential for delays, interruptions or cost overruns.

The manufacture of prototypes and commercial products will involve complex processes and the manufacturers engaged by us may encounter difficulties initiating and maintaining production. In the future, there could be a significant disruption in the supply of services, materials or products from current sources or, in the event of a disruption, we might not be able to locate alternative suppliers of services, materials, components or products of comparable quality at an acceptable price, or at all. In addition, we cannot be certain that our manufacturers will be able to complete the manufacture of prototypes or fill our orders for commercial products, once commercialized, in a timely manner. If we experience significant increased demand, or need to replace an existing manufacturer, there can be no assurance that additional supplies of product or additional manufacturing capacity will be available when required on terms that are acceptable to us, or at all. In addition, even if we are able to expand existing manufacturing or find new manufacturing, we may encounter delays in production. Any delays, interruption or increased costs in the supply of materials or manufacture of our products could have an adverse effect on our ability to meet customer demand for our products and result in lower revenues and net income.

Our reliance on external suppliers and development firms for execution of our single-port robotic surgical system development program means that we do not control all aspects of the development.

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

We rely heavily on external parties for successful execution of our single-port robotic surgical system development program, but do not control many aspects of their activities. As a result, many important aspects (including costs and timing) of product development are outside our direct control.

We are responsible for ensuring that our single-port 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. Our reliance on third parties does not relieve us of these responsibilities.

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

We currently have payables due to our primary product development supplier (the “Primary Supplier”) in excess of $6 million relating primarily to work performed prior to November 2019.

Our Primary Supplier has stopped all work with regard to the development of the Company’s robotic surgical system and there is no assurance that we will have sufficient capital to maintain deposits or prepayments with the Primary Supplier or make payments to the Primary Supplier on satisfactory terms in order to have the Primary Supplier resume work or to maintain our engagement of the Primary Supplier.

A product malfunction could result in delays, liability and negative perceptions of the single-port robotic surgical system and ourselves.

A malfunction or the inadequate design of our contemplated surgical system could result in product liability or other tort claims. Accidents involving our surgical system could lead to personal injury, death or physical damage. Any liability for damages resulting from malfunctions could be substantial and could adversely affect our business and results of operations. In addition, a well publicized actual or perceived problem could adversely affect the market’s perception of our surgical system. This could result in a decline in demand for our products, which would adversely affect our financial condition and results of operations.

If our contemplated products are found to be defective, we may be required to redesign or recall the surgical system. This redesign or recall may cause us to incur significant expenses, disrupt sales and adversely affect our reputation and our surgical system, which could adversely impact our revenue, operating results and profitability.

Certain reusable instruments, camera components and other accessories require repeated cleaning and sterilization

Certain reusable instruments, camera components and other accessories require repeated cleaning and sterilization between surgical procedures. There is no assurance that our product development and manufacturing partners will be successful in producing designs that achieve a predictable number of cleaning and sterilization cycles, or that the specified processes will result in sterile products. If product development efforts are unsuccessful in this regard, our economic model for pricing of reusable devices could become impractical to implement, our potential profit margins (if any) may be adversely affected, or our product offering could be deemed to not be viable for commercial use.

Once our products are available for commercial use, there is no assurance that customers will follow the cleaning and sterilization procedures that we recommend for our products. Failure by a customer to perform the appropriate cleaning and sterilization procedures could lead to patient injury or death, in which case we could be subject to litigation and possible regulatory enforcement. Further, even the allegation of the use of nonsterile product by a customer could have a materially adverse effect on our business.

We are party to a Civil Claim, the outcome of which cannot be predicted.

The outcome of the Civil Claim cannot be predicted. There is no assurance that we will be successful in defending against the Civil Claim or in our counterclaims asserted against the Service Provider. Please see the discussion under “Civil Claim” on page 63.

As we are a Canadian company, it may be difficult for United States shareholders to effect service on us or to realize on judgments obtained in the United States.

We are incorporated under the laws of the Province of Ontario, Canada, a number of our directors and officers are residents of Canada, and most or all of our assets and the assets of such persons are located outside the United States. Consequently, it may be difficult for United States investors to effect service of process within the United States upon us or upon such persons who are not residents of the United States, or to realize in the United States upon judgments of United States courts predicated upon civil liabilities under United States securities laws. A judgment of a United States court predicated solely upon such civil liabilities may be enforceable in Canada by a Canadian court if the United States court in which the judgment was obtained had jurisdiction, as determined by the Canadian court, in the matter. There is substantial doubt whether an original action could be brought successfully in Canada against any of such persons or us predicated solely upon such civil liabilities.

We are subject to risks related to additional regulatory burden and controls over financial reporting.

We are subject to the continuous and timely disclosure requirements of Canadian securities laws and the rules, regulations and policies of the Toronto Stock Exchange, the Ontario Securities Commission and other Canadian securities regulators, 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. We have made, and will continue to make, changes in these and other areas, including our internal controls over financial reporting. However, there is no assurance that these and other measures that we may take will be sufficient to allow us to satisfy our 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 us and require the time and attention of our management. We cannot predict the amount of the additional costs that we may incur, the timing of such costs or the impact that management’s attention to these matters will have on our business. In addition, our inability to maintain effective internal controls over financial reporting could increase the risk of an error in our financial statements. Our management, including our Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting. Our 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 our 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 we fail to maintain effective internal control over financial reporting, then there is an increased risk of an error in our financial statements that could result in us being required to restate previously issued financial statements at a later date.

We are also subject to corporate governance standards that apply to us as a foreign issuer listed on the Nasdaq and registered with the SEC in the United States. Although we substantially comply with the Nasdaq's corporate governance guidelines, we are exempt from certain Nasdaq requirements because we are subject to Canadian corporate governance requirements. We may from time to time seek other relief from corporate governance and exchange requirements and securities laws from the Nasdaq and other regulators.

Fluctuations in foreign currency exchange rates may adversely affect our financial results.

We conduct operations principally in the U.S. and Canada, and portions of our expenses, assets and liabilities are denominated in U.S. dollars and Canadian dollars. Since our consolidated financial statements are presented in U.S. dollars, we must translate our expenses, as well as assets and liabilities, into U.S. dollars at exchange rates in effect during or at the end of each reporting period. We have not historically hedged our exposure to foreign currency fluctuations. Accordingly, increases or decreases in the value of the Canadian dollar against the U.S. dollar could affect our operating losses and the value of balance sheet items denominated in foreign currencies.

We may be delisted from Nasdaq if we do not satisfy continued listing requirements.

On November 27, 2019, we received notifications by Nasdaq that we were not in compliance with Nasdaq Listing Rule 5550(a)(2) since the closing bid price for our Common Shares listed on Nasdaq was below $1.00 for 30 consecutive business days, and Nasdaq Rule 5550(b)(2) since the Market Value of Listed Securities for our Common Shares listed on Nasdaq was below $35 million for 30 consecutive business days. Nasdaq Rules further provide us with a period of 180 calendar days from the date of notification to regain compliance with the above noted Rules.

While these notifications do not currently impact our listing on the Nasdaq, there can be no assurance that we will be able to comply in the future with Nasdaq's bid price, Market Value of Listed Securities, or other continued listing requirements under Nasdaq Rules (the "**Continued Listing Requirements**"). If we are unable to satisfy the Continued Listing Requirements for which we received notifications from Nasdaq, and continue to be deficient after the applicable grace period(s), Nasdaq may commence procedures to delist our Common Shares from Nasdaq. If our Common Shares were to be delisted by Nasdaq, the market liquidity of our Shares could be adversely affected and the market price of our Common Shares could decline.

We may not be able to maintain our status as a "Foreign Private Issuer".

In order to maintain our status as a foreign private issuer, a majority of our Common Shares must be either directly or indirectly owned bynon-residents of the U.S. unless we also satisfy one of the additional requirements necessary to preserve this status. We may in the future lose our foreign private issuer status if a majority of our Common Shares are held in the United States and if we fail to meet the additional requirements necessary to avoid loss of our 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 we are not a foreign private issuer, we 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, we may lose the ability to rely upon exemptions from NASDAQ corporate governance requirements that are available to foreign private issuers.

We are 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.

We are an "emerging growth company" as defined in the JOBS Act. We 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 we had total annual gross revenues of US$1,070,000,000 or more; (b) the last day of our fiscal year following the fifth anniversary of the date of the first sale of our common equity securities pursuant to an effective registration statement under the Securities Act, such as this registration statement; (c) the date on which we, during the previous 3-year period, issued more than US$1,000,000,000 in non-convertible debt; or (d) the date on which we are deemed to be a 'large accelerated filer.'

For so long as we continue to qualify as an emerging growth company, we 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 our annual reports filed under the U.S. Exchange Act, as amended, even if we do not qualify as a "smaller reporting company," as well as certain other exemptions from various reporting requirements that are applicable to other public companies.

We are likely a ''passive foreign investment company'', which may have adverse U.S. federal income tax consequences for U.S. investors.

We believe we were classified as a "passive foreign investment company" or "PFIC" during the tax year ended December 31, 2019, and based on current business plans and financial expectations, we expect that we may be a PFIC for the current tax year and future tax years. If we are a PFIC for any year during a U.S. taxpayer's holding period of Common Shares, then such U.S. taxpayer generally will be required to treat any gain realized upon a disposition of the Common Shares or any so-called "excess distribution" received on its Common 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 (as defined below) or a Mark-to-Market Election (as defined below). Subject to certain limitations, such elections may be made with respect to the Common Shares. A U.S. taxpayer who makes a timely and effective QEF Election generally must report on a current basis its share of our net capital gain and ordinary earnings for any year in which we are a PFIC, whether or not we distribute any amounts to our shareholders. However, U.S. taxpayers should be aware that there can be no assurance that we will satisfy the record keeping requirements that apply to a qualified electing fund, or that we will supply U.S. taxpayers with information that such U.S. taxpayers require to report under the QEF Election rules, in the event that we are 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 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.

The Company may face cyber-security risks and threats.

Threats to information technology systems associated with cyber-security risks and cyber incidents or attacks continue to grow. It is possible that our business, financial and other systems or those of the companies, service providers or consultants with which we do business could be compromised, which might not be noticed for some period of time. Risks associated with these threats include, among other things, loss of intellectual property, disruption of business operations and safety procedures, loss or damage to worksite data delivery systems, and increased costs to prevent, respond to or mitigate cyber-security events.

Our financial condition and results of operations for fiscal 2020 may be adversely affected by the recent coronavirus outbreak.

If a pandemic, epidemic or outbreak of an infectious disease occurs in Canada, the United States or globally, our business may be adversely affected. In December 2019, a novel strain of COVID-19 was reported to have surfaced in Wuhan, China. The virus continues to spread globally and, at the time of this filing, has spread to over 50 countries, including Canada and the United States. Our operations could be adversely affected to the extent that coronavirus or any other epidemic harms the world economy in general and the capital markets in North America in particular. Our operations may experience disruptions, such as temporary closure of our offices, which may materially and adversely affect our business, financial condition and operational results. The duration of the business disruption and related financial impact cannot be reasonably estimated at this time but may materially affect our ability to operate our business and result in additional costs. Such events could impair our ability to raise necessary capital, cause us to incur additional expenses or disrupt the services of our external engineering and medical technology development and manufacturing firms, as well as service providers. The extent to which the coronavirus or other health epidemic may impact our business, operations, prospects and results will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of the coronavirus and the actions to contain the coronavirus or treat its impact, among others.

The global pandemic creates substantial uncertainty as to the willingness and ability of hospitals, HMOs, ambulatory care facilities and other prospective customers to purchase and implement robotic surgical systems.

The American College of Surgeons has called for hospitals to minimize, postpone or cancel elective procedures until the coronavirus (COVID-19) outbreak slows down. An elective surgical procedure slowdown in the robotic surgical space may result in a substantial negative impact on the market prospects for robotic surgical systems and instruments and related services.

Accordingly, COVID-19 may have a material adverse effect on:

- the ability of our suppliers to provide goods and services and other resources in a timely manner to support our business including our work toward achievement of our development milestones;
- present and future demand for robotic surgeries, equipment and related products; and
- our ability to complete pre-clinical and clinical trials of our robotic system and to obtain regulatory approvals as required on a timely basis.

Item 4. Information on the Company

A. History and Development of the Company

Titan Medical Inc. is the successor corporation formed by amalgamation under the Business Corporations Act (Ontario) on July 28, 2008.

Synergist Medical Inc. ("***Synergist***"), 2174656 Ontario Limited ("***Newco***") and KAM Capital Corp. ("***KAM***") entered into an amalgamation agreement on June 23, 2008, pursuant to which on July 28, 2008 Synergist amalgamated with Newco, a wholly-owned subsidiary of KAM, to form a new corporation called Titan Medical Inc. ("***Amalco***"). Thereafter, Amalco amalgamated with KAM pursuant to a vertical amalgamation to form a new corporation called Titan Medical Inc.

Synergist was incorporated on July 5, 2002 and commenced operations on May 31, 2006 for the purpose of developing robotic surgical technology. KAM was incorporated on November 28, 2007 and filed and obtained a receipt for a final prospectus from certain Canadian securities regulatory authorities in compliance with the TSX Venture Exchange's ("***TSX-V***") Policy on Capital Pool Companies ("***CPC Policy***"). Newco was formed as a special purpose wholly-owned subsidiary of KAM incorporated for the purpose of effecting the Amalgamations. The Amalgamations constituted the Qualifying Transaction of KAM under the CPC Policy.

The head office and registered office of Titan is located at 155 University Avenue, Suite 750, Toronto, Ontario M5H 3B7. Titan's main telephone number is (416) 548-7522. Our website is www.titanmedicalinc.com. Information contained on the Company's website does not form part of this Annual Report.

On June 19, 2018, we consolidated our issued and outstanding Common Shares on the basis of one post-consolidation Common Share for 30 pre-consolidation Common Shares (the "***Share Consolidation***"). The Share Consolidation was undertaken in connection with our application for a supplemental listing of our securities on the Nasdaq.

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".

Capital Expenditures

Titan is a development stage pre-revenue Company. Capital expenditures in each of the last three years have related to the acquisition of furniture and equipment plus additions to our patent portfolio, as follows:

	Furniture and Fixtures	Patent Rights
2019	—	$ 458,037
2018	—	$ 420,587
2017	$ 3,427	$ 201,409

Research and development activities undertaken with the prospect of gaining new scientific or technical knowledge and understanding are expensed as incurred. The costs of developing new products are capitalized as deferred development costs if they meet the development capitalization criteria under IFRS. These criteria include the ability to measure development costs reliably, that the product is technically and commercially feasible, that future economic benefits are probable and that we intend to and have sufficient resources to complete development and to use or sell the assets. To date, all the research and development costs have been expensed as the criteria for capitalization under IFRS have not yet been met.

Available Information

The SEC maintains an Internet site athttp://www.sec.gov that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Information is also available under the Company's profile on SEDAR (www.sedar.com) or on www.titanmedicalinc.com.

B. Business Overview

Our business plan consists of the development of computer-assisted robotic surgical technologies for application in minimally invasive surgery ("MIS") comprising our single-port robotic surgical system. The system under development includes 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. We intend to initially pursue gynecologic surgical indications for use of our single-port robotic surgical system.

Development of our single-port robotic surgical system proceeded with input from surgeons and operating room staff experienced in MIS, 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 MIS. This approach allowed us to design a robotic surgical system 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.

Our single-port robotic surgical system patient cart has been developed with the goal of delivering 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 with a diameter of approximately 25 millimeters 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 configurability for a number 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 our single-port robotic surgical system, we are planning continued development of 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. A software training system developer has produced 14 core surgical skills simulation modules customized for use with our surgeon workstation in the first phase of the comprehensive surgeon training curriculum that we are planning for our single-port robotic surgical system.

We have continuously evaluated our technologies under development for intellectual property protection through a combination of trade secrets and patent application filings and we have continued the filing and prosecution of patents. Our patent portfolio has increased from 12 issued patents at December 31, 2016 to 46 issued patents as of December 31, 2019. As of March 30, 2020, the Company has 85 patent applications and 50 patents.

As part of our development efforts, we have established certain milestones related to technology and design advancements as well as preclinical and clinical studies and completion of regulatory submissions. To assess progress, we regularly test and evaluate our technology. If such evaluations indicate technical defects or failure to meet cost or performance goals, the Company's development schedule could be further delayed. See "*Risk Factors*".

Development Objectives

We have used a combination of internal resources and external development firms to execute the research, development and regulatory plans for our single-port robotic surgical system. Development objectives were established to support our planned FDA 510(k) filing for marketing clearance in the U.S., and submittal of a Technical File to a European Notified Body for achievement of the CE mark, which indicates that a product for sale within the European Economic Area has been assessed to conform to health safety and environmental protection requirements.

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 IDE from the FDA, which must be submitted and approved in advance. Further, the recruitment of surgeons from multiple hospital sites will be necessary to perform the surgeries. Each of these sites will require approval of their independent Institutional Review Board ("IRB") to approve the studies.

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 our single-port surgical system. Insights gained from these preclinical studies have directed us 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 we announced that we had achieved hardware design freeze for our single-port robotic surgery system. In June 2019, we commenced preclinical live animal and cadaver studies according to GLP for FDA submittal. On July 18, 2019, we announced that we had completed all planned GLP surgical procedures necessary for our planned Investigational Device Exemption ("IDE") application to the FDA.

During the quarter ended September 30, 2019, we completed and documented the GLP procedures, and proceeded to complete the human factors evaluation studies (HFE), which included verification of production system operation with clinical experts under rigorous formal (summative) HFE under simulated robotic manipulation exercises. During the quarter, our European Notified Body also completed audits of our quality system procedures and related documentation for ISO Certification.

During the quarter ended December 31, 2019, we completed two of three intended fourth quarter milestones including: (i) receipt of a final independent report 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, and (ii) complete User Manual for robotic system setup by operating room staff and surgeon operation of the surgeon workstation, patient cart, instruments and accessories. The third milestone, receipt of ISO 13485 Certification, expected to be received by year-end 2019, was delayed in processing and was received January 24, 2020.

The future success of the Company is substantially dependent on our ability to raise equity financing to fund our research and development program and on maintaining the support of its research and development and manufacturing service providers. See "*Liquidity and Capital Resources*".

Given the uncertainty of, among other things, our ability to secure required capital to fund development and operating costs in a timely manner, product development timelines, regulatory processes and requirements (such as confirmatory human studies), actual costs and development times will exceed those previously set forth by the Company. An accurate estimate of the future costs of the development milestones and regulatory phases is not possible at this time.

Current Development Plan

Our development milestones are set forth in the table below (the "***Current Development Plan***").

Milestone Number	Development Milestones	Estimated Cost (in US million $)	Schedule for Milestone Completion	Comments
Milestone 1	a) Obtain final independent report 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		Q4 2019	Completed
	b) Complete User Manual for robotic system setup by operating room staff and surgeon operation of surgeon workstation, patient cart, instruments and accessories			Completed
	c) Obtain ISO 13485 Certification(1)			Completed Q1-2020
Milestone 2	a) Perform additional software development and test system performance b) Implement and test improvements to instruments, camera systems and accessories			
	c) Perform biocompatibility testing of instruments, camera systems and accessories at independent lab	TBD	TBD	
	d) Perform electrical safety testing for surgeon workstations and patient cart, including electromagnetic compatibility (EMC) and electromagnetic interference (EMI) tests at independent lab			
	e) Update draft application for IDE as additional testing lab data is received and continue preparations for human confirmatory studies			
Milestone 3	a) Launch rebranded product line, including logos with trademark pending, literature and presentation templates, product and packaging labeling, and new website	TBD	TBD	
	b) Complete system software validation			
	c) Submit IDE application to FDA(2)			
Milestone 4	a) Receive IDE approval from FDA(3)			
	b) Receive approvals from IRB Committees of IDE hospitals	TBD	TBD	
	c) Commence human confirmatory studies under IDE protocols for FDA submittal			
Milestone 5	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	TBD	TBD	
	d) Ongoing software development and implementation			
	e) Planning and preparation for manufacturing and commercialization			
Milestone 6	a) Planning and preparation for commercialization	TBD	TBD	

Due to the ongoing limited availability of capital resources we have been unable to fund the previously planned pace of product development which has indefinitely moved out the projected date and will add to the estimated costs for the submission of our 510(k) application. We have withdrawn the projections for achievement of all development milestones beyond Milestone 1, including their timing and cost.

The increases in time and costs over prior estimates relate to a reduction in our pace of product development due to limited financial resources. Accordingly, we have taken temporary measures to reduce our cash burn over historical rates, including the suspension of product development and reducing our general and administrative overhead where possible.

(1) The March 2019 Prospectus disclosed that obtaining ISO 13485 Certification was expected to occur in the third quarter of 2019; however, the certification was received on January 24, 2020.

(2) Due to the ongoing limited availability of capital resources as well as the necessary product changes identified we have not yet submitted our IDE application to the FDA. In addition, we have been unable to fund planned software development, verification and validation or complete the necessary product development, testing and documentation needed to meet regulatory requirements for an IDE application to the FDA. We have withdrawn the projections for achievement of all development milestones beyond Milestone 1, including their timing and cost.

(3) We have withdrawn our projections for achievement of all development milestones beyond Milestone 1, including their timing and cost.

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 to achieve them. We expect that additional specific milestones could be identified as the development of our single-port robotic surgical system progresses, or existing milestones, budgets and the schedule for completion of each milestone may change depending on a number of factors including the results of our development program, clarification of or changes to regulatory requirements, the availability of financing and the ability of development firms engaged by us to complete work assigned to them. The total costs to complete the development of our single-port robotic surgical system cannot yet be determined with a high degree of certainty, and the costs may be substantially higher than estimated. Please see "*Special Note Regarding Forward-Looking Statements*" and "*Risk Factors*".

Market Opportunity

We are unable to estimate the size of the market for robotic surgical systems and related products and services and we are unable to project our future revenues due to the recent onset of the global pandemic contagious disease known as the novel coronavirus (COVID-19). The global pandemic creates substantial uncertainty as to the willingness and ability of hospitals, HMOs, ambulatory surgical centers and other prospective customers to purchase and implement robotic surgical systems.

Additionally, the American College of Surgeons has called for hospitals to minimize, postpone or cancel elective procedures until the coronavirus (COVID-19) outbreak slows down. An elective surgical procedure slowdown in the robotic surgical space may result in a substantial negative impact on the market prospects for robotic surgical systems and instruments and related services.

Our business and prospects are subject to risks associated with and arising from the outbreak ofCOVID-19, and the uncertainty of the impacts, duration and severity of the outbreak. We believe that our previous market growth projections are rendered unreliable given the severe impact of COVID-19 on the healthcare sector as well as, more broadly, on the economy and the capital markets. We are therefore withdrawing and disclaiming all prior disclosures and references in our annual information form, management's discussion and analysis, material change reports, news releases, investor presentations, prospectuses and other regulatory filings, including without limitation the documents incorporated by reference herein, with respect to the following:

- market research reports published by external market research firms,
- market growth projections and any and all product and service pricing estimates and revenue projections by us, and
- market and revenue growth set forth in news releases or filings of other issuers in the robotic surgical technology sector.

For greater certainty, the documents incorporated into this Form 20F by reference which contain any of the foregoing disclosures or references are to be read in conjunction with this Form 20F strictly without the foregoing disclosures or references.

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 and 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), Memic Innovative Surgery Ltd. from Israel (Hominis™), 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, our 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 our planned FDA 510(k) application, we have already filed several Q-Submissions with the FDA to clarify in detail the preclinical studies and confirmatory human data required to support our 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 the EU Medical Device Regulation or MDR, 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 first 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. We previously initiated communication with a European Notified Body to arrange for the audit of our quality system in 2019, and ISO 13485:2003 certification was received on January 24, 2020.

In order to commercialize products in Canada, regulatory approval from Health Canada (Therapeutic Products Directorate, Medical Devices Bureau) is required. Medical device license 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 our surgical system requires specialized skill and knowledge. Given the limited capital available, there is no assurance that we will be able to procure the required skill and knowledge to carry out our research and development and the resources that are available to us, through our current officers, employees and external medical technology development firms, may be insufficient. We will continue to assess our requirements and recruit and engage required qualified personnel and development firms as needed, subject to budget limitations.

Intellectual Property Protection

We continuously evaluate our technologies under development for intellectual property protection. In accordance with industry practice, our proprietary rights are currently protected through a combination of copyright, trademark, 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 our anticipated principal markets. Patents provide us with a potential right to exclude others from incorporating our technical innovations into their own products and processes. Where appropriate, we may license third party technologies to provide us with the flexibility to adopt preferred technologies. Intellectual property protection, including patent filing and prosecution, are costly and there is no assurance that we will have sufficient funding required in order to file and prosecute patent applications for any or all of our inventions.

As of March 30, 2020, we owned of 50 patents and 85 patent applications. We anticipate expanding our intellectual property portfolio by filing additional patent applications as we progress in the development of robotic surgical technologies, and if appropriate, acquiring and/or by licensing suitable technologies.

The scope of protection obtained, if any, from our 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 us with the expected competitive advantages, or they may not be issued in a manner that gives us the protection that we seek, or they may be successfully challenged by third parties.

We also seek to avoid disclosure of our intellectual property and proprietary information by requiring employees and consultants to executenon-disclosure agreements and also seek to retain ownership of intellectual property through the execution of assignment of intellectual property agreements, requiring our employees and consultants to assign to us intellectual property developed in the course of their employment or engagement. We also utilize non-disclosure agreements to govern interactions with business partners and prospective business partners and other relationships where disclosure of proprietary information may be necessary, and we take measures to carefully protect our intellectual property rights in agreements with external development firms.

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

Although we have registrations and pending applications for certain trademarks, we may be unable to obtain or maintain trademark registrations for the marks and names we use in one or more countries. It is also possible that our use of "SPORT", "SPORT Surgical System", "Titan", "Titan Medical" or variations thereof, as well as other trademarks and variations thereof for which registration is pending, may infringe or contravene the rights, including trademark rights, of other parties in one or more countries. In the event of actual or alleged infringement or contravention of rights, we may be forced to cease using these marks and names.

Operations

Until the third quarter of 2019, we were developing our core technologies through external engineering and medical technology development and manufacturing firms with oversight from our management. Certain components of our robotic surgical system were being developed to our specifications by various third-party suppliers, medical technology development and manufacturing firms through purchase orders. We do not have long-term contracts with any third parties.

However, due to the limited availability of capital, we have suspended product development and reduced our general and administrative overhead where possible.

We maintain our head office at subleased premises in Toronto, Ontario.

C. Organizational Structure

Titan does not have any subsidiaries.

D. Property, Plants and Equipment

Aside from the purchase of furniture and fixtures as described in the Capital Expenditures above, we do not have any material fixed assets. Until the third quarter of 2019, we outsourced the development and manufacturing of our single-port robotic surgical system, instruments, camera systems and accessories to contract development and manufacturing companies. To date, all of the research and development costs have been expensed as all of the criteria for capitalization have not yet been met. As of December 31, 2019, we lease space for our corporate office in Toronto, Ontario. The Company has also secured a leased facility in Chapel Hill, North Carolina. We are not aware of any environmental issues related to these leased premises.

Item 4A. Unresolved Staff Comments

Not applicable.

Item 5. Operating and Financial Review and Prospects

Overview

A. Operating Results

See the management's discussion and analysis of the Company for the year ended December 31, 2019 and the year ended December 31, 2018 incorporated by reference into this Form 20-F as Exhibit 15.1 and Exhibit 15.2, respectively.

B. Liquidity and Capital Resources

See the management's discussion and analysis of the Company for the year ended December 31, 2019 and the year ended December 31, 2018 incorporated by reference into this Form 20-F as Exhibit 15.1 and Exhibit 15.2, respectively.

C. Research and Development, Patents and Licenses, etc.

See the management's discussion and analysis of the Company for the year ended December 31, 2019 and the year ended December 31, 2018 incorporated by reference into this Form 20-F as Exhibit 15.1 and Exhibit 15.2, respectively.

D. Trend Information

Historical patterns of expenditures cannot be taken as an indication of future expenditures. The amount and timing of expenditures and therefore liquidity and capital resources vary substantially from period to period depending on the number of research and development programs being undertaken at any one time, the stage of the development programs, the timing of significant expenditures for manufacturing, studies and clinical trials.

E. Off-balance Sheet Arrangements

See the management's discussion and analysis of the Company for the year ended December 31, 2019 and the year ended December 31, 2018 incorporated by reference into this Form 20-F as Exhibit 15.1 and Exhibit 15.2, respectively.

F. Tabular Disclosure of Contractual Obligations

The below details of contractual obligations are as of December 31, 2019.

	Payments due by period ($)				
Contractual Obligations	**Total**	**Less than 1 year**	**1-3 years**	**3-5 years**	**More than 5 years**
Long-Term Debt Obligations	nil				
Capital (Finance) Lease Obligations	29,072	21,071	8,001		
Operating Lease Obligations	nil				
Purchase Obligations	1,327,294	1,327,294			
Other Long-Term Liabilities Reflected on the Company's Balance Sheet	nil				

G. Safe Harbor

The Company seeks safe harbor for our forward-looking statements contained in Items 5.E and F. See the heading "Cautionary Note Regarding Forward-Looking Statements" above.

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

The following sets out details respecting the directors and executive officers of the Company, as of the date of this Annual Report. The names, the municipalities of residence, the positions held by each in Titan and the principal occupation for the past five years of the directors and executive officers of the Company are as follows:

Name and Municipality Offices Held and Country of Residence	Offices Held	Director Since	Principal Occupation(s) During the Five-Year Period Ending December 31, 2019
David J. McNally Salt Lake City, Utah, U.S.A.	President, Chief Executive Officer and Director	2017	Chief Executive Officer and President of Titan from January 3, 2017 and January 9, 2017 respectively. Prior thereto, from October 2009 to August 2016, Mr. McNally served as the founder, President, Chief Executive Officer and Chairman of the Board of Directors of Domain Surgical, Inc., a privately held developer, manufacturer and marketer of a new advanced energy surgery platform for precise cutting and coagulation of soft tissue, and reliable vessel sealing in open and laparoscopic procedures. Domain Surgical, Inc. was merged with OmniGuide Holdings, Inc. in August 2016.
Stephen Randall Toronto, Ontario, Canada	Chief Financial Officer, Secretary and Director	2017	Chief Financial Officer of Titan since March 2010. Prior thereto, Mr. Randall served in senior financial roles with private, publicly-traded and start-up companies in the technology sector. Mr. Randall holds the Canadian Chartered Professional Accountant and Certified General Accountant designations.
John E. Barker(1)(2)(3) Burlington, Ontario, Canada	Director	2009	Corporate director. Previously served as Senior Vice President of Finance, CFO and in other senior executive positions at Zenon Environmental Inc. from 2000 to 2006.

Name and Municipality Offices Held and Country of Residence	Offices Held	Director Since	Principal Occupation(s) During the Five-Year Period Ending December 31, 2019
Charles Federico(1)(2)(3) Cornelius, North Carolina, U.S.A	Director	2019	Mr. Federico has 46 years of experience in the medical device industry. As a Director of MAKO Surgical Corp., he served as Chairman, Lead Director, Compensation Committee Chairman, Governance Committee Chairman and an Audit Committee Member from 2007 to 2013. MAKO, a developer of minimally invasive robotic-enabled techniques for knee surgery, was acquired by Stryker in 2013 for $1.65 billion. Prior to that, Mr. Federico was President at Orthofix International N.V. from 1996 to 2006 and was also CEO beginning in 2001. From 1988 to 1996 he was President and General Manager at Smith & Nephew Endoscopy (formerly Dyonics, Inc.), and from 1981 to 1985 he served as Vice President of Dyonics and as Director of Marketing.
John E. Schellhorn(1)(2)(3) Portsmouth, New Hampshire, U.S.A.	Director	2017	Mr. Schellhorn is a 32-year veteran of the medical technology industry, where he has held various senior management positions in the US, Canada and Asia/Pacific. Since 2017, Mr. Schellhorn has been President and CEO of Global Kinetics Corporation, a Melbourne, Australia headquartered company commercializing the world's first objective measurement technology for patients with Parkinson's Disease. From 2012 to 2016, he was President and CEO of Monteris Medical Inc., a Canadian neurosurgery company which employed the world's first MRI compatible robot.

Notes:
(1) Member of Audit Committee of the Company.
(2) Member of Compensation Committee of the Company.
(3) Member of Governance and Nominating Committee.

Leadership Team

The Company's leadership team is as follows:

David J. McNally,
President, Chief Executive Officer & Director

Mr. McNally is an experienced entrepreneur and public company CEO with over 32 years of experience in the medical device industry. Throughout his career, Mr. McNally has founded and co-founded start-up companies that commercialized best-in-class surgical, life and organ support, diagnostic and home-care capital equipment and disposables. Among other accomplishments, he has experience leading companies trading on boards ranging from over-the-counter marketplaces to the Nasdaq and TSX. Mr. McNally also has experience in FDA clearance and CE mark for Class II devices as well as managing relationships with strategic partners including OEM suppliers and global distributors. Mr. McNally is formerly, the founder, President, CEO & Chairman of Domain Surgical Inc., a developer, manufacturer and marketer of advanced energy surgical platforms, that merged with OmniGuide Holdings, Inc. in 2016. Mr. McNally is also a former co-founder, President & CEO of ZEVEX International Inc. (Nasdaq: ZVXI), a developer, manufacturer and marketer of award-winning medical devices, that was acquired by MOOG Inc. in 2007. He is a co-inventor on more than 40 U.S. and international patents.

Education: Bachelor of Science in mechanical engineering from Lafayette College and MBA from the University of Utah.

Stephen Randall, CPA, CGA
Chief Financial Officer & Director

Mr. Randall has over 30 years of executive experience in established and start-up companies including accounting, finance, capital markets, tax planning, compliance, IT management, mergers & acquisitions and operations.

Education: Bachelor of Arts in political science from the University of Western Ontario, Commerce Degree from the University of Windsor.

Perry Genova, PhD
SVP of R&D

Dr. Genova is an expert in medical device product development including surgical robotics, an author of 32 peer-reviewed papers and an inventor named on more than 30 U.S. Patents and 24 patents pending.

Education: PhD in biomedical engineering from the University of North Carolina at Chapel Hill and Bachelor of Science in electrical engineering from the University of North Carolina at Charlotte.

Curtis Jensen
VP of Quality& Regulatory Affairs

Mr. Jensen has over 20 years of experience leading quality and regulatory affairs teams at established andstart-up U.S. companies to achieve quality systems compliance, 510(k) clearances and CE Mark approvals.

Education: Master of Science in applied mathematics from Johns Hopkins University and Bachelor of Science in electrical engineering from Utah State University.

Sachin Sankholkar
VP of Marketing

Mr. Sankholkar has over 20 years of advanced medical device marketing experience, including 15 years at Intuitive Surgical Inc. developing robotic surgeon network and procedural expertise in multiple subspecialties.

Education: Master of Science in biomedical engineering from Drexel University and MBA from the University of Southern California.

Chris Seibert
VP of Business Development

Mr. Seibert has over 12 years of advanced medical device sales and management experience, including 10 years at Intuitive Surgical Inc. and Stereotaxis Inc. with IDN/GPO sales channel expertise and C-level access and network.

Education: Bachelor of Arts from the University of Alabama, Master of Arts in human relations from the University of Oklahoma and MBA from the University of South Alabama.

Surgeon Advisory Board

The Company has assembled a surgeon advisory board consisting of the following surgeons who are widely regarded as leaders in the field of medical robotics or fields of surgery where robotics is expected to have a significant impact:

Arnold Advincula, M.D.

Dr. Advincula is Vice-Chair of Women's Health & Chief of Gynecology at the Sloane Hospital for Women, Columbia University Medical Center/New York Presbyterian Hospital. Formerly, he was Professor of Obstetrics and Gynecology, Director of the Minimally Invasive Surgery Division and Fellowship, and Director of the Endometriosis Center at the University of Michigan. More recently, he was Director of the Center for Specialized Gynecology and Director of the Education Institute at the Nicholson Center, an advanced medical and surgical simulation training facility at Florida Health. He is currently Vice President of the American Association of Gynecologic Laparoscopy and a Member-at-Large for the Society of Gynecologic Surgeons. He is a leader in minimally invasive surgical techniques and one of the world's most experienced gynecologic robotic surgeons, who has published and taught extensively in the area of minimally invasive surgery, as well as developed surgical instruments that are in use worldwide.

Eduardo Parra- Davilla, M.D.

Dr. Parra-Davila is the Director for Minimally Invasive and Colorectal Surgery and Director of Hernia and Abdominal Wall Reconstruction at Florida Hospital Celebration Health. He is a well-respected national and international surgeon. He has trained over a thousand surgeons worldwide and has performed surgical procedures in numerous countries utilizing the latest techniques in hernia, minimally invasive and robotic surgery. Dr. Parra- Davila is Board Certified in General Surgery and Colorectal Surgery. He completed his Fellowship in Advanced Laparoscopy and Minimally Invasive Surgery at Texas Endosurgery Institute in San Antonio, Texas and Colon and Rectal Surgery at The University of Texas in Houston, Texas. His Residency was completed at Jackson Memorial Hospital, University of Miami, in Miami, Florida. He obtained his Medical Degree from The Universidad De Los Andes in Venezuela.

Lee L. Swanstrom, M.D.

Dr. Swanstrom heads the Division of GI and Minimally Invasive Surgery at the Oregon Clinic and is Director of Providence Health System's Complex GI and Foregut Surgery Postgraduate Fellowship Program. In addition, he is Clinical Professor in the Department of Surgery at Oregon Health & Science University (OHSU), a Director of the American Board of Surgery, and Past President of both the Society of American Gastrointestinal Endoscopic Surgeons (SAGES) and the Fellowship Council (FC). Most recently, he became the Chief Innovations Officer and Director of the Innovations Fellowship at the Institutes des Hôpitalo Universitaires of the University of Strasbourg, France. He is the editor of Surgical Innovation and the author of over 300 scientific papers and 50 book chapters. This has resulted in 13 patents and a successful medical device start-up company. He is and has been an investigator on numerous outcomes research studies for new procedures such as Natural Orifice Translumenal Endoscopic Surgery (NOTES) to determine their safety and efficacy for establishing new standards of care. He remains focused on developing innovative approaches to the minimally invasive treatment of foregut and other gastrointestinal disorders.

John Valvo, M.D.

Dr. Valvo, a practicing surgeon, is the Executive Director of Robotic and Minimally Invasive Surgery at Rochester General Hospital in Rochester, New York, where he formerly was the Chief of Urology. Following a 20-year career performing open surgery, Dr. Valvo founded the robotic surgery program at Rochester General Hospital in early 2004, which currently ranks in the top two percent of robotic surgery volume in the United States. The program has trained over 30 robotic surgeons and enabled the completion of more than 7,000 robotic urology, gynecology, general and colorectal surgeries. Dr. Valvo has authored more than 100 scientific articles and helped start many robotic programs in the northeast. His focus on robotic surgery credentialing led to a notable published paper on policy guidelines for robotic surgery. He is a fellow of the American College of Surgeons and American Urological Association, and a member of the Society for Laparoscopic Surgeons.

Family Relationships

There are no family relationships between any directors or executive officers of the Company.

Arrangements

There are no known arrangements or understandings with any major shareholders, customers, suppliers or others, pursuant to which any of the Company's officers or directors was selected as an officer or director of the Company.

B. Compensation

Compensation Discussion and Analysis

The Board of Directors is responsible for evaluating compensation for the President and Chief Executive Officer and the Chief Financial Officer and reviewing their salaries and any bonuses on an annual basis. The President and Chief Executive Officer and Chief Financial Officer are responsible for evaluating and reviewing the salaries and bonuses of all other employees and consultants of the Company. While the Board of Directors of the Company has not adopted a written policy concerning the compensation of Executive Officers, it has developed a consistent approach and philosophy relating to compensation. The overriding principles in the determination of executive compensation are the need to provide total compensation packages that will attract and retain qualified and experienced executives, reward the executives for their contribution to the overall success of the Company and integrate the longer term interests of the executives with the investment objectives of the Company's shareholders.

Based on the size of the Company and its relatively small number of employees, the Company's executives are required to be multi-disciplined, self-reliant and highly experienced. In determining specific compensation amounts for the executive officers, the Board of Directors considers factors such as experience, individual performance, length of service, role in achieving corporate objectives, positive research and development results, and compensation compared to other employment opportunities for executives.

Titan is an early-stage company engaged in the development of robotic surgical technologies. As we are in the product development stage, we cannot rely on revenues from operations to finance our activities and advance our goals. Consequently, we look to raising the requisite capital to finance such activities through equity financings, which are influenced by the financial market's assessment of our overall enterprise value and our prospects. These in turn are influenced, to a great extent, by the results of our research and development activities and progress in commercializing robotic surgical technologies. The contribution that each of our President and Chief Executive Officer and our Chief Financial Officer makes to this endeavor, on a subjective analysis by the Compensation Committee and the Board of Directors at the end of each fiscal year, is the primary factor in determining aggregate compensation. In considering such contribution, the Board of Directors considers various factors, including, among other things, (i) the ongoing and progressive development of our robotic surgical technology; (ii) the identification and attainment of appropriate milestones that adequately reflect the ongoing development of our robotic surgical technology, (iii) the formation and development of key partnerships with leading academic and research organizations through which our products can be tested, and (iv) the recruitment, management and retention of qualified technical and other personnel, among other things.

Compensation for Executive Officers consists of base salary, cash bonuses and incentive stock options. In establishing compensation, we attempt to pay competitively in the aggregate as well as deliver an appropriate balance between annual compensation (base salary and cash bonuses) and option-based compensation (incentive stock options).

The role of the Compensation Committee in recommending to the Board the compensation for Executive Officers is described under "*Compensation Committee*".

The decisions in respect of each individual compensation element are taken into account in determining each of the other compensation elements to ensure an Executive Officer's overall compensation is consistent with the objectives of the compensation program while considering that not all objectives are applicable to each Executive Officer.

In 2017, the Compensation Committee retained Hugessen Consulting Inc. ("***Hugessen***") to serve as the Committee's independent compensation consultant. Hugessen has provided independent advice to the Compensation Committee with respect to executive and director compensation and relative governance matters. In 2019, Hugessen provided the following services to the Compensation Committee:

- Completed a comprehensive review of executive and director pay levels;
- Advised the Compensation Committee in developing a short-term and long-term incentive framework; and
- Provided additional input and advice to the Compensation Committee, as requested.

The table below outlines fees paid to Hugessen in 2019:

Hugessen Consulting Inc.	2019 Fees
Executive Compensation Related Fees	$ 25,394
All Other Fees	—
Total	$ 25,394

In addition, in 2019, the Compensation Committee retained Pearl Meyer & Partners LLC. ("***Pearl Meyer***") to serve as the Committee's U.S. independent compensation consultant. Pearl Meyer provides independent advice to the Compensation Committee with respect to executive and director compensation. In 2019, Pearl Meyer provided the following services to the Compensation Committee:

- Review its executive and non-employee director compensation programs, including both levels of compensation and plan structure.

The table below outlines fees paid to Pearl Meyer in 2019:

Pearl Meyer & Partners LLC.	2019 Fees
Executive Compensation Related Fees	$ 24,900
All Other Fees	—
Total	$ 24,900

The Compensation Committee did not follow a formal practice to consider the implications of the risks associated with our compensation policies and practices in 2019.

We have established a stock option plan for our officers, directors, employees and service providers, prepared in compliance with the requirements of the TSX, which is administered by the Board of Directors. The purpose of our stock option plan is to advance our interests by closely aligning the participants' personal interests with those of our shareholders generally. Subject to the provisions of the stock option plan, our Board of Directors determines and designates from time to time the optionees to whom options are to be granted, the number of Common Shares to be optioned and the other terms and conditions of the stock option grant. Our Board of Directors considers factors such as individual performance, the significance of individual contribution to our success, experience, and length of service in determining the amounts of options awarded. No options were awarded in 2019.

Compensation Committee

The awarding of annual bonus and option-based awards is subject to the discretion of the Compensation Committee and Board of Directors, exercised annually, as more fully described herein, and is at risk and not subject to any minimum amount. Furthermore, if the Compensation Committee determines that the compensation, by the Company, for certain executives and other personnel, including option-based awards, is low compared to comparable companies, the Compensation Committee may determine to grant option-based awards to assist us in retaining and attracting key executive talent and to further align the compensation of the executive officers and other key employees with the long-term interests of shareholders. The Compensation Committee and the Board of Directors also have the discretion to adjust the weightings assigned to objectives for executives, including the President and Chief Executive Officer, and award a higher or lower annual incentive value to one or more executive officers than achievement of applicable corporate objectives might otherwise suggest, based on their assessment of the challenges and factors that might have impacted the ability to achieve the objective or attain the highest assessment ranking, or other factors such as rewarding individual performance or recognizing the ability (or inability) of the Company to achieve its goals and strategic objectives and create shareholder value. In exercising its discretion, the Compensation Committee and Board of Directors may also consider, among other factors, risk management and regulatory compliance, the performance of executive officers in managing risk and whether payment of the incentive compensation might present or give rise to material risks to the Company or otherwise affect the risks faced by the Company and the management of those risks.

In assessing the general competitiveness of the compensation of our Executive Officers, the Compensation Committee considers base salary, total cash compensation and total direct compensation (including the value of long-term incentives) relative to a comparator group of publicly listed companies and reviews benchmark data composed of the group's executive compensation data for matching positions. The peer group consists of the following comparable technology companies:

Compensation Peer Group

Corindus Vascular Robotics, Inc.	Profound Medical Corp.
Misonix, Inc.	Ekso Bionics Holdings, Inc.
IRadimed Corporation	MRI Interventions, Inc.
Microbot Medical Inc.	ReWalk Robotics Ltd.
TransEnterix, Inc.	Medigus Ltd.
Apyx Medical Corporation	Restauration Robotics Inc.
Nuvectra Corporation	Sensus Healthcare Inc.
Ra Medical Systems Inc.	Stereotaxus Inc.

In addition to advice obtained from compensation consultants, the Compensation Committee undertakes its own assessment of the competitiveness of our compensation and incentive programs, based on information obtained from such consultants and other information that may be available to the Compensation Committee. Decisions as to compensation are made by the Compensation Committee and the Board of Directors and may reflect factors and considerations other than the information and, if applicable, recommendations provided by compensation consultants.

Executive Officers

Summary Compensation Table

The following table and the notes thereto sets forth information concerning annual total compensation for each Executive Officer in 2019. All amounts in the table below and the notes thereunder are stated in Titan's functional and presentation currency, which is U.S. dollars. The exercise prices of options are presented in either US or Canadian dollars corresponding in the original currency of each grant. Canadian employees are compensated in Canadian dollars. For reporting purposes, the Canadian dollar amount is translated to U.S. dollars using the year end exchange rate, as quoted by the Bank of Canada, on December 31, 2019.

Name and principal position	Salary (U.S.$)	Share-based Awards (U.S.$)	Option-based Awards(1) (U.S.$)	Non-equity Incentive Plan Compensation ($)		Pension Value (U.S.$)	All Other Compensation (U.S.$)	Total Compensation (U.S.$)
				Annual Incentive Plans	Long-term Incentive Plans			
David McNally *President & CEO*	330,000	0	0	0	0	0	165,000	495,000
Stephen Randall *Chief Financial Officer*	209,729	0	0	0	0	0	103,475	313,204
Chad Zaring(2) *Chief Commercial Officer*	250,000	0	647,722	0	0	0	0	897,722
Perry Genova *Senior Vice President Research and Development*	250,000	0	0	0	0	0	125,000	375,000
Curtis Jensen *Vice President Quality and Regulatory Affairs*	210,000	0	0	0	0	0	52,500	262,500
Sachin Sankholkar *Vice President, Marketing*	180,000	0	0	0	0	0	50,000	230,000
Chris Seibert *Vice President Business Development*	180,000	0	0	0	0	0	50,000	230,000

Notes:

(1) The fair value of options granted was estimated at the date of grant using the Black-Scholes option pricing model using assumptions based on expected life, risk free rate, expected dividend yield and expected volatility.

(2) Mr. Zaring resigned from the Company on February 7, 2020.

Outstanding share-based awards and option-based awards

The following table shows all awards granted to Executive Officers and outstanding on December 31, 2019.

	Option-based Awards					Share-based Awards		
Name	Number of securities underlying unexercised options (#)	Option Exercise Price CDN($)	Option Exercise Price USD($)	Option Expiration Date (DD-M-YY)	Value of unexercised in-the-money options USD($)	Number of shares or units of shares that have not vested (#)	Market or payout value of share-based awards that have not vested USD($)	Market or payout value of vested share-based awards not paid out or distributed USD($)
David McNally	277,519	4.54		17-Jan-24	0	138,760	0	0
	55,018	4.54		19-Jan-25	0	55,018	0	0
Stephen Randall	3,313	4.54		09-Jun-20	0	0	0	0
	1,319	4.54		23-Dec-20	0	0	0	0
	17,589	4.54		24-Aug-21	0	0	0	0
	36,336	4.54		19-Jan-25	0	36,336	0	0
Chad Zaring(1)	467,255		2.20	19-Jul-26	0	467,255	0	0
Perry Genova	16,667	4.54		7-Feb-24	0	8,334	0	0
	33,333	4.54		17-Apr-24	0	16,667	0	0
	41,680	4.54		19-Jan-25	0	41,680	0	0
Curtis Jensen	16,667	4.54		17-Apr-24	0	8,334	0	0
	18,950	4.54		8-Nov-24	0	9,475	0	0
	35,011	4.54		19-Jan-25	0	35,011	0	0
Sachin Sankholkar	9,000	4.54		27-Jan-21	0	0	0	0
	11,726	4.54		24-Aug-21	0	0	0	0
	30,010	4.54		19-Jan-25	0	30,010	0	0
Chris Seibert	9,000	4.54		27-Jan-21	0	0	0	0
	11,726	4.54		24-Aug-21	0	0	0	0
	30,010	4.54		19-Jan-25	0	30,010	0	0

Notes:
(1) Mr. Zaring resigned from the Company on February 7, 2020.

The following table shows the value from incentive plans vested or earned by Executive Officers under the Company's incentive plans and the annual incentive bonus payout during the financial year ended December 31, 2019

Name	Option-based awards – Value vested during the year USD($)	Share-based awards – Value vested during the year USD($)	Non-equity incentive plan compensation – Value earned during the year USD($)
David McNally	16,980	0	165,000
Stephen Randall	55,675	0	103,475
Chad Zaring(1)	0	0	0
Perry Genova	78,180	0	125,000
Curtis Jensen	71,006	0	52,500
Sachin Sankholkar	37,119	0	50,000
Chris Seibert	37,119	0	50,000

Notes:
(1) Mr. Zaring resigned from the Company on February 7, 2020. None of Mr. Zaring options were vested at the time of his resignation.

Securities Authorized for Issuance Under Equity Compensation Plan

The following table sets forth certain information as of December 31, 2019 with respect to compensation plans under which equity securities of the Company are authorized for issuance:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted–average exercise price of outstanding options, warrants and rights	Number of securities remaining for future issuance under equity compensation plan
US dollar denominated options	845,042	US $ 2.65	
CDN dollar denominated options	860,379	CDN $ 5.89	
Equity compensation plan approved by securityholders	1,714,421		4,271,731

Termination and Change of Control Benefits

No Executive Officer is entitled to any form of compensation as a result of termination or change of control of the Corporation.

Indebtedness of Directors and Executive Officers

No director or executive officer of the Corporation, nor any proposed nominee for election as a director of the Corporation, nor any associate or affiliate of any of them is or was indebted to the Corporation at any time since the beginning of the last completed financial year of the Corporation.

Compensation of Directors

The annual retainer for all directors for the year ended December 31, 2019 was CDN $30,000 other than for the Chair of the Board who received USD $50,000, annual amounts for the chair of a committee or the board was CDN $3,200 or US $2,500 and meeting fees for all directors was CDN $1,300 or US $1,000.

The Board of Directors determines the form of payment of the compensation paid to directors. All compensation to directors is paid through the issuance of stock options, or cash, at the discretion of the directors, on a quarterly basis for meeting fees and on an annual basis, each July, for other fees. Currently directors' compensation is paid through a combination of cash and stock options. The table below reflects in detail the compensation earned by non-employee directors in the 12-month period ended December 31, 2019.

Name	Fees Earned (USD$)	Share-based Awards (USD$)	Option-based Awards (USD$)	Non-equity Incentive Plan Compensation (USD$)	Pension Value (USD$)	All Other Compensation (USD$)	Total (USD$)
John E. Barker	19,739		30,340				50,079
Dr. Bruce G. Wolff(1)	6,000						6,000
John Schellhorn	49,700						49,700
Domenic Serafino(2)	49,097						49,097
Charles Federico	78,834		324,560				403,394

(1) Dr. Bruce G. Wolff resigned as a director effective May 1, 2019.
(2) Domenic Serafino resigned as a director effective February 11, 2020.

Directors' and Officers' Insurance

We maintain insurance for our benefit and the benefit of our directors and officers as a group, in respect of the performance by them of duties of their office. The premium paid for such insurance in 2019 was $466,600.

Outstanding share-based awards and option-based awards

The following table shows all option-based and share-based awards granted to non-employee directors and outstanding on December 31, 2019.

Name	Option-based Awards				Share-based Awards		
	Number of securities underlying unexercised options (#)	Option Exercise Price per share CDN($)	Option Expiration Date (DD-M-YY)	Value of unexercised in-the-money options USD($)	Number of shares or units of shares that have not vested (#)	Market or payout value of share-based awards that have not vested ($)	Market or payout value of vested share-based awards not paid out or distributed ($)
Martin C. Bernholtz(1)	1,044	51.60	09-Jun-20	0	0	0	0
	415	30.60	23-Dec-20	0	0	0	0
	5,570	30.00	24-Aug-21	0	0	0	0
John E. Barker	1,044	51.60	09-Jun-20	0	0	0	0
	415	30.60	23-Dec-20	0	0	0	0
	5,687	30.00	24-Aug-21	0	0	0	0
	7,674	9.00	06-Jul-25	0	0	0	0
	21,053	3.28	29-Aug-25	0	0	0	0
	25,719	4.54	18-Jul-26	0	0	0	0
Bruce G. Wolff	828	51.60	09-Jun-20	0	0	0	0
	330	30.60	23-Dec-20	0	0	0	0
	5,277	30.00	24-Aug-21	0	0	0	0
	3,807	9.00	06-Jul-25	0	0	0	0
	10,445	3.28	29-Aug-25	0	0	0	0
John Schellhorn	12,269	4.41	7-Sept-24	0	0	0	0
Domenic Serafino(2)	5,590	7.49	06-Jul-25	0	0	0	0
Charles Federico	253,000	USD 3.40	01-May-26	0	0	0	0
	41,273	USD 3.40	19-Jul-26	0	0	0	0

Notes:
(1) Martin Bernholtz resigned from his positions with the Company on March 15, 2018.
(2) Domenic Serafino resigned as a director effective February 11, 2020.

Incentive Plan Awards – Value Vested or Earned During Fiscal Year and December 31, 2019

The following table shows the value from incentive plans vested or earned bynon-employee directors under the Company's incentive plans and the annual incentive bonus payout during the financial year ended December 31, 2019.

Name	Option-based awards – Value vested during the year (U.S.$)	Share-based awards – Value vested during the year (U.S.$)	Non-equity incentive plan compensation – Value earned during the year (U.S.$)
John Barker	30,340	0	0
John Schellhorn	0	0	0
Domenic Serafino	0	0	0
Dr. Bruce G. Wolff	0	0	0
Charles Federico	0	0	0

C. Board Practices

The Canadian Securities Administrators have adopted National Instrument 58-101 – *Disclosure of Corporate Governance Practices* (the "**Disclosure Rule**"). The Disclosure Rule establishes disclosure requirements regarding corporate governance practices of a reporting issuer as well as the requirement to file any written code of business conduct and ethics that a reporting issuer has adopted. Set out below is a description of our approach to corporate governance as required by the Disclosure Rule.

Board of Directors

As of December 31, 2019, four of the six members of the Board of Directors are independent directors. An independent director is defined as a director who has no direct or indirect material relationship with the Company, being a relationship which could be reasonably expected to interfere with the exercise of a director's independent judgement. As at December 31, 2019, Messrs. McNally and Randall are considered to be non-independent by virtue of their management position with the Company and their employment relationships with the Company. The Board believes that their extensive knowledge of the Company's business and affairs is beneficial to the other directors and their participation as directors contributes to the effectiveness of the Board. Messrs. John E. Barker, Charles Federico, Dominic Serafino and John Schellhorn are considered to be independent directors. These determinations were made by the Board based upon an examination of the factual circumstances of each director and consideration of any interests, business or relationships, which any director may have with the Company.

As part of each regularly scheduled quarterly board meeting, the independent directors have anin-camera session, exclusive of non-independent directors and management. At the present time, the Board believes that the knowledge, experience and qualifications of its independent directors are sufficient to ensure that the Board can function independently of management and discharge its responsibilities.

The Chairman of the Board of Directors, Charles Federico, is an independent director. The Company does not have a designated lead director. The Board utilizes its own in-house expertise, and that of its legal counsel, to provide advice and consultation on current and anticipated matters of corporate governance.

Board Mandate

The Board of Directors is responsible for the overall stewardship of the Company and operates pursuant to a written mandate, which was updated and approved by the Board on February 10, 2015.

Position Descriptions

The Board has developed written position descriptions for the Chair of the Board of Directors and the chair of each committee. With respect to management's responsibilities, generally, any matters of material substance to the Company are submitted to the Board for, and are subject to, its approval. Such matters include those matters which must by law be approved by the Board (such as share issuances) and other matters of material significance to the Company, including any debt or equity financings, investments, acquisitions and divestitures, and the incurring of material expenditures or legal commitments. The Board and/or its audit committee also reviews and approves the Company's major communications with shareholders and the public including the annual report, if any, (and financial statements contained therein), quarterly reports to shareholders, the annual management information circular and the annual information form. The specific corporate objectives which the chief executive officer is responsible for meeting (aside from the overall objective of enhancing shareholder value) are, in the Company's case, typically related to the advancement, growth, management and financing of the Company and its research and development project and matters ancillary thereto.

Orientation and Continuing Education

We do not provide a formal orientation or education program for Board members, as it believes that such programs are not appropriate for a development stage company with an experienced Board, the members of which have been selected for their specific expertise.

Our directors are highly experienced and knowledgeable, both individually and as a group. The directors have either a medical or business background and have long careers in or related to the medical, health or financial industry and are intimately familiar with our project, through sufficient interactions with management and technology developers.

To ensure that the Board has and maintains the skill and knowledge necessary for them to meet their obligations as directors of the Company, each of the directors has observed the performance of the single-port robotic surgical system. Summary technology presentations by management relating to various aspects of our project is made at meetings of the Board. The Board believes that discussion among the directors and management at these meetings provides a valuable learning resource for the directors with non-technical expertise in the subject matter presented, and that those directors provide management with valuable insights into broader issues facing us.

Ethical Business Conduct

The Company is committed to maintaining high standards of corporate governance and this philosophy is communicated by the Board to management, and by management to employees, on a regular basis.

In order to ensure that the directors exercise independent judgment in considering transactions and agreements, the Board requires that all directors declare any conflicts of interest with issues or situations as they arise. This would include transactions/agreements in which a director/officer has material interest.

Nomination of Directors

The Corporate Governance and Nominating Committee standing committee appointed by the Board and it is responsible for overseeing and assessing the functioning of the Board and the committees of the Board and for the development, recommendation to the Board, implementation and assessment of effective corporate governance principles. The Committee's responsibilities also include identifying candidates for directorship and recommending that the Board select qualified director candidates for election at the next annual meeting of shareholders.

The Corporate Governance and Nominating Committee is composed entirely of independent directors, being John E. Barker, Charles Federico, Dominic Serafino and John Schellhorn.

Audit Committee

The Board of Directors has established an Audit Committee. The Audit Committee met four times during the financial year ended December 31, 2019.

Composition of the Audit Committee

The table below sets out the members of the Audit Committee as of December 31, 2019 and states whether they are financially literate and/or independent.

Director	Independent	Financially Literate
John E. Barker	Yes	Yes
Charles Federico	Yes	Yes
Dominic Serafino	Yes	Yes
John Schellhorn	Yes	Yes

Note that Mr. Serafino resigned from the Company effective February 11, 2020, and the Audit Committee now consists of the remaining three members listed above.

Relevant Education and Experience

Messrs. Barker, Federico and Schellhorn are the current directors on the Corporation's Audit Committee and have been senior officers and/or directors of publicly traded companies and business executives for a number of years. In these positions, each individual has been responsible for receiving financial information relating to the entities of which they were directors or senior officers. They had or have developed an understanding of financial statements generally and understand how those statements are used to assess the financial position of a company and its operating results. Each member of the Audit Committee also has a significant understanding of the business in which the Corporation is engaged and has an appreciation for the relevant accounting principles for the Corporation's business.

Compensation and Compensation Committee

Compensation matters are dealt with by the Compensation Committee of the Corporation. The function of the Compensation Committee is to review the compensation terms of each officer of the Corporation annually as well as at any other times as necessary. After considering inputs from senior management, the Compensation Committee makes a recommendation to the Board for approved compensation terms for each officer of the Corporation. Among other things, the Compensation Committee also recommends the structure of the compensation in terms of the amount of cash and/or number of options to be granted. The members of the Compensation Committee have several years of relevant experience, having served as senior business executives with other companies and as members of compensation committees of other companies.

As of December 31, 2019, all four members of the Compensation Committee, namely, Messrs. Barker, Federico, Serafino and Schellhorn are considered to be independent directors. The Compensation Committee met four times during the financial year ended December 31, 2019.

Note that Mr. Serafino resigned from the Company effective February 11, 2020, and the Compensation Committee now consists of the remaining three members listed above.

Other Board Committees

The Board has no standing committee other than the Audit Committee, the Compensation Committee and the Corporate Governance and Nominating Committee.

Assessments

The Board, its committees and individual directors are not regularly assessed with respect to their effectiveness and contribution, as the Board believes that such assessments are generally more appropriate for corporations of significantly larger size and complexity than the Company and which may have significantly larger boards of directors. A more formal assessment process will be instituted as, if, and when the Board deems necessary.

Director Tenure

Each of the directors will serve until the close of the next annual meeting of the Company or until his or her successor is elected or appointed. The Board has not adopted a term limit for directors. The Board believes, at this time, that the imposition of director term limits on a board may discount the value of experience and continuity amongst board members and runs the risk of excluding experienced and potentially valuable board members. This decision is subject to review on an annual basis. The Board does not follow a formal director assessment procedure in evaluating Board members. However, the Board believes that it can best strike the right balance between continuity and fresh perspectives without mandated term limits.

Representation of Women on the Board and in Executive Officer Positions

The Corporate Governance and Nominating Committee's Charter encourages diversity in the composition of the Board of Directors and requires periodic review of the composition of the Board of Directors as a whole to recommend, if necessary, measures to be taken so that the Board of Directors reflects the appropriate balance of diversity, knowledge, experience, skills and expertise required for the Board of Directors as a whole. Accordingly, while the Board of Directors has not adopted a written policy nor targets relating to the identification and nomination of women directors, the Board of Directors does take into consideration a nominee's potential to contribute to diversity within the Board of Directors. Given that diversity is part of determining the overall balance, which includes gender, the Board of Directors has not adopted a gender specific policy target.

The Corporate Governance and Nominating Committee recognizes the value of diversity. Currently, the Board of Directors is comprised of male directors. The Board of Directors does not follow a formal process for proposing female nominees for Board of Director vacancies. Rather the Board of Directors focuses on the qualification and professional or business experience of each individual nominee.

Consistent with our approach to diversity at the Board of Director level, our hiring practices include consideration of diversity across a number of areas, including gender. None of the current executive officer positions of the Company are held by women. We do not have a target number of women executive officers. Given the small size of its executive team, we believe that implementing targets would not be appropriate. However, in its hiring practices, we consider the level of representation of women in executive officer positions.

D. Employees

The below details the number of employees by geographic location as of the end of the past three financial years.

LOCATION	December 31, 2019	December 31, 2018	December 31, 2017
Canada	4	4	4
United States	6	5	5
France	0	1	1
Annual Total	10	10	10

E. Share Ownership

The following table and the notes thereto set out the names of all the directors and officers of Titan, the number of Common Shares beneficially owned, directly or indirectly, or over which control or direction is exercised by each of them, and information regarding options granted to them as at March 30, 2020. The percentage of common shares beneficially owned is computed on the basis of 51,816,877 Common Shares outstanding as of March 30, 2020.

Name and Title	Number of Common Shares Beneficially Held	Percentage of Common Shares Beneficially Held *	Number of Options Held	Exercise Price (CN$)	Expiration Date
John E. Barker	32,714		1,044	51.60	09-Jun-20
Director			415	30.60	23-Dec-20
			5,687	30.00	24-Aug-21
			7,674	9.00	06-Jul-25
			21,053	3.28	29-Aug-25
			25,719	4.54	18-Jul-26
			25,765	0.66	28-Jan-27
David J. McNally	4,167		277,519	4.54	17-Jan-24
President, Chief Executive Officer and Director			55,018	4.54	19-Jan-25
Stephen Randall	22,993		3,313	4.54	09-Jun-20
Chief Financial Officer, Secretary and Director			1,319	4.54	23-Dec-20
			17,589	4.54	24-Aug-21
			36,336	4.54	19-Jan-25
John E. Schellhorn	294		12,269	4.41	7-Sept-24
Director					
Charles Federico			253,000	US$ 3.40	01-May-26
Director and Chairman			41,273	US$ 3.40	19-Jul-26
Perry Genova	514		16,667	4.54	7-Feb-24
Senior Vice President, Research and Development			33,333	4.54	17-Apr-24
			41,680	4.54	19-Jan-25
Curtis Jensen	0		16,667	4.54	17-Apr-24
Vice President, Quality and Regulatory Affairs			18,950	4.54	8-Nov-24
			35,011	4.54	19-Jan-25
Sachin Sankholkar	667		9,000	4.54	27-Jan-21
Vice President, Marketing			11,726	4.54	24-Aug-21
			30,010	4.54	19-Jan-25
Christopher Seibert	85		9,000	4.54	27-Jan-21
Vice President, Business Development			11,726	4.54	24-Aug-21
			30,010	4.54	19-Jan-25
Martin C. Bernholtz			1,044	51.60	09-Jun-20
Former Director			415	30.60	23-Dec-20
			5,570	30.00	24-Aug-21

Name and Title	Number of Common Shares Beneficially Held	Percentage of Common Shares Beneficially Held *	Number of Options Held	Exercise Price (CN$)	Expiration Date
Domenic Serafino Former Director			5,590	7.49	06-Jul-25
Bruce G. Wolff Former Director			828	51.60	09-Jun-20
			330	30.60	23-Dec-20
			5,277	30.00	24-Aug-21
			3,807	9.00	06-Jul-25
			10,445	3.28	29-Aug-25
Chad Zaring Former Chief Commercial Officer	39,190		467,255	US$ 2.20	19-Jul-26

* Less than 1%.

For more information regarding share-based awards and option-based awards to directors and employees, see "*Item 6. Directors, Senior Management and Employees – B. Compensation*" above.

Item 7. Major Shareholders and Related Party Transactions

A. Major Shareholders

There are no shareholders who, to our knowledge, own currently beneficially, directly or indirectly, more than 5% of the Common Shares.

Voting Rights

The Company's major shareholders do not have different voting rights.

Shares Held in the United States

As of March 24, 2020, there were approximately 13 registered holders of the Company's Common Shares in the United States, with combined holdings of 20,294,922 Common Shares.

Change of Control

As of the date of this Annual Report, there were no arrangements known to the Company which may, at a subsequent date, result in a change of control of the Company.

Control by Others

To the best of the Company's knowledge, the Company is not directly or indirectly owned or controlled by another corporation, any foreign government, or any other natural or legal person, severally or jointly.

B. Related Party Transactions

Other than as set out below, since January 1, 2019, other than employment and executive compensation matters described under "*Executive Compensation*", there have been no transactions or loans between us and:

(a) enterprises that directly or indirectly through one or more intermediaries, control or are controlled by, or are under common control with, us;

(b) associates, meaning unconsolidated enterprises in which we have a significant influence or which have significant influence over us;

(c) individuals owning, directly or indirectly, an interest in the voting power of us that gives them significant influence over us, and close members of any such individual's family;

(d) key management personnel, that is, those persons having authority and responsibility for planning, directing and controlling the activities of ours, including directors and senior management of us and close members of such individuals' families; and

(e) enterprises in which a substantial interest in the voting power is owned, directly or indirectly, by any person described in (c) or (d) or over which such a person is able to exercise significant influence, including enterprises owned by directors or major shareholders of us and enterprises that have a member of key management in common with us.

C. Interests of Experts and Counsel

Not Applicable.

Item 8. Financial Information

A. Consolidated Statements and Other Financial Information

See "Item 19 – Financial Statements".

Legal Proceedings

On October 16, 2019, Naglreiter Consulting, LLC ("Naglreiter") filed a Complaint for breach of contract against the Company in the U.S. District Court for the Southern District of Florida. The Complaint, which was served on the Company on October 24, 2019, alleges that the Company has not paid amounts owed under several invoices and, further, that the invoices total approximately $5 million.

On December 5, 2019, the Company filed an Answer, Affirmative Defenses and Counterclaim denying the allegations, asserting defenses to the Complaint, and asserting counterclaims against Naglreiter for (i) breach of contract including that the services that were rendered by Naglreiter were not rendered in a satisfactory manner and that Naglreiter failed to return property paid for by the Company, (ii) fraudulent inducement, (iii) negligent misrepresentation, (iv) indemnification and (v) conversion for refusing to return Titan's property.

On February 13, 2020, Naglreiter filed an Amended Complaint against the Company to add a complaint of unjust enrichment alleging that Naglreiter had conferred benefits on the Company without the Company paying fair market value for them and asked the courts for a constructive trust over certain property of the Company in Naglreiter's possession.

On March 9, 2020, the Company filed an Answer and Affirmative Defenses to the Amended Complaint and an Amended Counterclaim, denying the allegations, asserting defenses to the Amended Complaint, and bringing additional counterclaims of (i) replevin to recover possession of personal property held by Naglreiter, (ii) civil theft for depriving the Company of its right to certain property in Naglreiter's possession and (iii) injunctive relief to have Naglreiter cease and desist the violation of confidentiality provisions in the parties' agreements.

The Company is seeking a return of property having a value of over $4 million as well as the return of amounts paid for work not done or inadequately done by Naglreiter. The Company intends to defend itself vigorously in this matter and pursue all relief to which it is entitled.

Other than the Naglreiter litigation, there are currently no legal proceedings to which we are or were a party to, or that any of our property is or was the subject of, and we are not aware of any such proceedings that are contemplated. No penalties or sanctions were imposed against us by a court relating to securities legislation or by a securities regulatory authority during the year ended December 31, 2018 or the nine months ended September 30, 2019, nor have we entered into a settlement agreement with a securities regulatory authority, or been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Dividend Policy

We have not declared or paid dividends in the past. We presently intend to retain future earnings, if any, to finance the expansion and growth of our business. Any future determination to pay dividends will be at the discretion of our board of directors and will depend on our financial conditions, results of operations, capital requirements and other factors the board of directors deems relevant. We had negative cash flow from operating activities for our fiscal year ended December 31, 2019 and the negative cash flow is expected to continue.

There are no other restrictions on our ability to pay dividends. However, the *Business Corporations Act* (Ontario) does not permit a corporation to pay dividends if the corporation is, or would after the payment, be unable to pay its liabilities as they become due or the realizable value of the corporation's assets would thereby be less than the aggregate of its liabilities and stated capital of all classes. In addition, the terms of any future debt or credit facility may preclude us from paying dividends.

Significant Changes

On March 25, 2020, the Company entered into definitive agreements with institutional investors that provide for the purchase and sale of 7,000,000 common shares of the Company (the "**Common Shares**") at a per share purchase price of $0.17 per Common Share and 3,500,000 Common Share purchase warrants (each, a "**Warrant**"), resulting in total gross proceeds of approximately $1.2 million. Each whole Warrant is exercisable to purchase one Common Share (a "**Warrant Share**") at an exercise price of $0.19 per Common Share for a period of five years following the date of closing of the offering.

H.C. Wainwright & Co. is acting as the exclusive placement agent for the offering.

Titan intends to use the net proceeds from the offering for general corporate purposes including: resuming the development of its single-port robotic surgical system, instruments and accessories; funding working capital (including the reduction of outstanding payables); and capital expenditures.

On December 23, 2019, the Company entered into a common share purchase agreement with Aspire Capital whereby Aspire Capital committed to purchase up to $35 million of common shares of Titan at Titan's request from time to time,
until June 23, 2022. Subsequent to the commencement of the Aspire Agreement and subsequent to December 31, 2019, Titan sold Common Shares to Aspire pursuant to the Aspire Agreement as outlined in the following table:

Grant Date	Common shares issued	Value
January 3, 2020	500,000	$ 219,600
January 6, 2020	500,000	229,300
January 8, 2020	400,000	195,160
January 10, 2020	500,000	247,550
January 17, 2020	600,000	303,000
January 23, 2020	600,000	295,320
February 6, 2020	600,000	282,000
February 13, 2020	708,048	300,000
	4,408,048	$2,071,930

On January 28, 2020, we issued 25,765 stock options with an exercise price of CDN $0.657 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years.

On January 3, 2020, we announced that Cambridge Design Partnership Ltd. ("Cambridge") had subscribed for Common Shares. We issued 501,148 Common Shares at a price of $0.50 per share satisfied through the cancellation of the trade payable with Cambridge of $250,574 which has been included in capital.

Item 9. The Offer and Listing

A. Offer and Listing

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".

B. Plan of Distribution

Not Applicable.

C. Markets

The Company's outstanding common shares are listed on the TSX and are also listed on the NASDAQ.

D. Selling Shareholders

Not Applicable.

E. Dilution

Not Applicable.

F. Expenses of the Issue

Not Applicable.

Item 10. Additional Information

A. Share Capital

Not Applicable.

B. Memorandum and Articles of Association

Incorporation

The Company is an Ontario corporation and is the successor corporation formed pursuant to two separate amalgamations (the "Amalgamations") under the *Business Corporations Act* (Ontario) ("**OBCA**") on July 28, 2008.

The following is a brief description of the Amalgamations.

Synergist Medical Inc. ("***Synergist***"), Titan Medical Inc. (formerly, 2174656 Ontario Limited) ("***Newco***") and KAM Capital Corp. ("***KAM***") entered into an amalgamation agreement on June 23, 2008, pursuant to which on July 28, 2008 Synergist amalgamated with Newco, a wholly-owned subsidiary of KAM, to form a new corporation called Titan Medical Inc. ("***Amalco***"). Thereafter, Amalco amalgamated with KAM pursuant to a vertical amalgamation to form a new corporation called Titan Medical Inc.

Synergist was incorporated on July 5, 2002 and commenced operations on May 31, 2006 for the purpose of developing robotic surgical technology. KAM was incorporated on November 28, 2007 and filed and obtained a receipt for a final prospectus from certain Canadian securities regulatory authorities in compliance with the TSX Venture Exchange's ("***TSX-V***") Policy on Capital Pool Companies ("***CPC Policy***"). Newco was formed as a special purpose wholly-owned subsidiary of KAM incorporated for the purpose of effecting the Amalgamations. The Amalgamations constituted the Qualifying Transaction of KAM under the CPC Policy.

Objects and Purposes of the Company

Our articles do not contain and are not required to contain a description of our objects and purposes. There is no restriction contained in our articles on the business that we may carry on.

Voting on Certain Proposal, Arrangement, Contract or Compensation by Directors

Other than as disclosed below, neither our articles nor our corporate by-laws restrict our directors' power to: (a) vote on a proposal, arrangement or contract in which the directors are materially interested; or (b) to vote with regard to compensation payable to themselves or any other members of their body in the absence of an independent quorum.

Our corporate by-laws provide that a director who: (a) is a party to; or (b) is a director or an officer of, or has a material interest in, any person who is a party to; a material contract or transaction or proposed material contract or transaction with us shall disclose the nature and extent of such director's interest at the time and in the manner provided by the OBCA. Any such contract or transaction or proposed material contract or transaction shall be referred to our board of directors or shareholders for approval in accordance with the OBCA even if such contract or proposed material contract or transaction is one that in the ordinary course of our business would not require approval by our board of directors or shareholders, and a director interested in a contract or transaction so referred to our board of directors shall not attend any part of a meeting of our board of directors during which the contract or transaction is discussed and shall not vote on any resolution to approve such contract or transaction except as provided by the OBCA.

Subject to our articles and any unanimous shareholder agreement, our directors shall be paid such remuneration for their services as our board of directors may from time to time determine. Our directors shall also be entitled to be reimbursed for travelling and other expenses properly incurred by them in attending meetings of our board of directors or any committee thereof. Nothing in our corporate by-laws shall preclude any director from serving the Company in any other capacity and receiving remuneration therefor in that capacity.

The OBCA provides that a director who: (a) is a party to a material contract or transaction or proposed material contract or transaction with the Company; or (b) is a director or an officer of, or has a material interest in, any person who is a party to a material contract or transaction or proposed material contract or transaction with the Company, shall not attend any part of a meeting of directors during which the contract or transaction is discussed and shall not vote on any resolution to approve the contract or transaction unless the contract or transaction is one: (i) relating primarily to such director's remuneration as a director of the Company or one of our affiliates; (ii) for indemnity or insurance for the benefit of such director in his or her capacity as a director; or (iii) with one of our affiliates.

Where a material contract is made or a material transaction is entered into between the Company and a director of the Company, or between the Company and another person of which a director of the Company is a director or officer or in which he or she has a material interest: (a) the director is not accountable to us or our shareholders for any profit or gain realized from the contract or transaction; and (b) the contract or transaction is neither void nor voidable, by reason only of that relationship or by reason only that the director is present at or is counted to determine the presence of a quorum at the meeting of directors that authorized the contract or transaction, if the director disclosed his or her interest in accordance with the OBCA and the contract or transaction was reasonable and fair to us at the time it was approved.

Borrowing Powers of Directors

Our corporate by-laws provide that, if authorized by our directors, we may, subject to our articles:

- borrow money upon our credit;
- issue, reissue, sell, pledge or hypothecate bonds, debentures, notes or other evidences of indebtedness of the Company, whether secured or unsecured;
- give a guarantee on behalf of the Company to secure performance of any present or future indebtedness, liability or obligation of any person; and
- mortgage, hypothecate, pledge or otherwise create a security interest in all or any currently owned or subsequently acquired real or personal, movable or immovable, property of the Company including book debts, rights, powers, franchises and undertakings, to secure any such bonds, debentures, notes or other evidences of indebtedness or guarantee or any other present or future indebtedness, liability or obligation of the Company.

Amendment to the borrowing powers described above requires an amendment to our corporate by-laws and articles. Our corporate by-laws do not contain any provisions in connection with amending the by-laws. The OBCA provides that our board of directors may by resolution, make, amend or repeal any by-laws that regulate our business or affairs and that our board of directors shall submit such by-law, amendment or repeal to our shareholders at the next meeting of shareholders and the shareholders may confirm, reject or amend the by-law, amendment or repeal.

Qualifications of Directors

Under our corporate by-laws and the OBCA, the following persons are disqualified from being a director of the Company: (i) a person who is less than 18 years of age; (ii) a person who has been found under the *Substitute Decisions Act*, 1992 or under the *Mental Health Act* to be incapable of managing property or who has been found to be incapable by a court in Canada or elsewhere; (iii) a person who is not an individual; and (iv) a person who has the status of a bankrupt. Subject to our articles, a director is not required to be a shareholder of the Company. At least 25% of our directors must be resident Canadian and if we have less than four directors, at least one director must be a resident Canadian.

Share Rights

See Description of the Company's Securities Registered Under Section 12 of the Securities Exchange Act of 1934, which is incorporated by reference into this Form 20-F as Exhibit 2.1, for a summary of our authorized capital and the rights attached to our common shares.

Procedures to Change the Rights of Shareholders

The rights, privileges, restrictions and conditions attaching to our shares are contained in our articles and such rights, privileges, restrictions and conditions may be changed by amending our articles. In order to amend our articles, the OBCA requires a resolution to be passed by a majority of not less than two-thirds of the votes cast by the shareholders entitled to vote thereon. In addition, if we resolve to make particular types of amendments to our articles, a holder of our shares may dissent with regard to such resolution and, if such shareholder so elects, we would have to pay such shareholder the fair value of the shares held by the shareholder in respect of which the shareholder dissents, determined as of the close of business on the day before the resolution was adopted. The types of amendments that would be subject to dissent rights include without limitation: (i) to add, remove or change restrictions on the issue, transfer or ownership of shares of a class or series of our shares; and (ii) to add, remove or change any restriction upon the business that we may carry on or upon the powers that we may exercise.

Meetings

Each director holds office until our next annual general meeting or until his office is earlier vacated in accordance with our articles, corporate by-laws or with the provisions of the OBCA. A director appointed or elected to fill a vacancy on our board also holds office until our next annual general meeting.

Annual meetings of our shareholders must be held at such time in each year not more than 15 months after the last annual meeting, as our board of directors may determine. Notice of the time and place of a meeting of shareholders must be sent not less than twenty-one days and not more than fifty days, before the meeting.

Meetings of our shareholders shall be held at our registered office or, if our board of directors shall so determine, at some other place in Ontario or, at some place outside Ontario if all the shareholders entitled to vote at the meeting so agree.

Our board of directors, the chair of our board or our chief executive officer shall have the power to call a special meeting of our shareholders at any time.

The OBCA provides that our shareholders may requisition a special meeting in accordance with the OBCA. The OBCA provides that the holders of not less than five percent of our issued shares that carry the right to vote at a meeting sought to be held may requisition our directors to call a special meeting of shareholders for the purposes stated in the requisition.

Under our by-laws, the quorum for the transaction of business at any meeting of our shareholders is one person present in person or by proxy and holding or representing in the aggregate not less than 20% of our outstanding shares entitled to vote at such meeting.

Limitations on Ownership of Securities

Except as provided in the Investment Canada Act (Canada), there are no limitations specific to the rights of non-Canadians to hold or vote our shares under the laws of Canada or Ontario, or in our charter documents.

Change in Control

There are no provisions in our articles or by-laws that would have the effect of delaying, deferring or preventing a change in control of the Company, and that would operate only with respect to a merger, acquisition or corporate restructuring involving the Company or our subsidiaries.

Ownership Threshold

Neither our by-laws nor our articles contain any provisions governing the ownership threshold above which shareholder ownership must be disclosed. In addition, securities legislation in Canada requires that we disclose in our proxy information circular for our annual meeting and certain other disclosure documents filed by us under such legislation, holders who beneficially own more than 10% of our issued and outstanding shares.

United States federal securities laws require us to disclose, in our annual reports on Form 20-F, holders who own 5% or more of our issued and outstanding voting shares.

C. Material Contracts

Other than contracts entered into in the ordinary course of our business, there were no material contracts to which we are or have been a party to for the two years preceding this Annual Report.

D. Exchange Controls

Canada has no system of exchange controls. There are no Canadian restrictions on the repatriation of capital or earnings of a Canadian public company to non-resident investors. There are no laws in Canada or exchange restrictions affecting the remittance of dividends, profits, interest, royalties and other payments to non-resident holders of the Company's securities, except as discussed below under "Item 10. Additional Information – E. Taxation".

There are no limitations under the laws of Canada or in the organizing documents of the Company on the right of foreigners to hold or vote securities of the Company, except that the *Investment Canada Act* may require review and approval by the Minister of Industry (Canada) of certain acquisitions of "control" of the Company by a "non-Canadian". The threshold for acquisitions of control is generally defined as beingone-third or more of the voting shares of the Company. "Non-Canadian" generally means an individual who is not a Canadian citizen, or a corporation, partnership, trust or joint venture that is ultimately controlled by non-Canadians.

E. Taxation

Canadian Federal Income Tax Consequences

The following is, as of the date hereof, a summary of the principal Canadian federal income tax considerations under the*Income Tax Act* (Canada) (the "***Tax Act***") generally applicable to a holder of common shares who, for purposes of the Tax Act and at all relevant times, is neither resident in Canada nor deemed to be resident in Canada for purposes of the Tax Act and any applicable income tax treaty or convention, and who does not use or hold (and is not deemed to use or hold) common shares in carrying on a business in Canada, deals at arm's length with and is not affiliated with us (a "***Holder***").

This summary does not apply to a Holder (i) that is a "financial institution" for purposes of themark-to-market rules contained in the Tax Act; (ii) that is a "specified financial institution" as defined in the Tax Act; (iii) an interest in which is a "tax shelter investment" as defined in the Tax Act; or (iv) that has elected to report its tax results in a functional currency other than Canadian currency. Special rules, which are not discussed in this summary, may apply to a Holder that is an "authorized foreign bank" within the meaning of the Tax Act or an insurer carrying on business in Canada and elsewhere. Such Holders should consult their own tax advisors.

This summary is based upon the provisions of the Tax Act (including the regulations ("***Regulations***") thereunder) in force as of the date hereof and our understanding of the current administrative policies and assessing practices of the Canada Revenue Agency (the "***CRA***") published in writing by the CRA prior to the date hereof. This summary takes into account all specific proposals to amend the Tax Act (and the Regulations) publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof (the "***Tax Proposals***") and assumes that the Tax Proposals will be enacted in the form proposed, although no assurance can be given that the Tax Proposals will be enacted in their current form or at all. This summary does not otherwise take into account any changes in law or in the administrative policies or assessing practices of the CRA, whether by legislative, governmental or judicial decision or action. This summary is not exhaustive of all possible Canadian federal income tax considerations and it does not take into account other federal or any provincial, territorial or foreign income tax legislation or considerations, which may differ materially from those described in this summary.

This summary is of a general nature only and is not, and is not intended to be, and should not be construed to be, legal or tax advice to any particular Holder, and no representations concerning the tax consequences to any particular Holder are made. **Holders should consult their own tax advisors regarding the income tax considerations applicable to them having regard to their particular circumstances.**

Currency Conversion

Generally, for purposes of the Tax Act, all amounts relating to the acquisition, holding, or disposition of common shares must be converted into Canadian dollars based on the exchange rates as determined in accordance with the Tax Act. The amounts subject to withholding tax and any capital gains or capital losses realized by a Holder may be affected by fluctuations in the Canadian-U.S. dollar exchange rate.

Dividends

Dividends paid or credited (or deemed to be paid or credited) to a Holder by us are subject to Canadian withholding tax at the rate of 25% unless reduced by the terms of an applicable tax treaty. For example, under the Canada-United States Income Tax Convention (1980) (the "***US Treaty***"), as amended, the dividend withholding tax rate is generally reduced to 15% in respect of a dividend paid or credited to a Holder beneficially entitled to the dividend who is resident in the U.S. for purposes of the US Treaty and whose entitlement to the benefits of the US Treaty is not limited by the limitation of benefits provisions of the US Treaty. **Holders are urged to consult their own tax advisors to determine their entitlement to relief under the US Treaty or any other applicable tax treaty as well as their ability to claim foreign tax credits with respect to any Canadian withholding tax, based on their particular circumstances.**

Disposition of Common Shares

A 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, unless the common share constitutes or is deemed to constitute "taxable Canadian property" to the Holder thereof for purposes of the Tax Act, and the gain is not exempt from tax pursuant to the terms of an applicable tax treaty or convention.

In general, provided the common shares are listed on a "designated stock exchange" (which currently includes the TSX and Nasdaq) at the date of the disposition, the common shares will only constitute "taxable Canadian property" of a Holder if, at any time within the 60-month period preceding the disposition: (i) such Holder, persons with whom the Holder did not deal at arm's length, partnerships in which the Holder or a person with whom the Holder did not deal at arm's length holds a membership interest directly or indirectly through one or more partnerships, or any combination thereof, owned 25% or more of the issued shares of any class or series of our share capital, and (ii) more than 50% of the fair market value of the common shares was derived directly or indirectly from one or any combination of (A) real or immovable property situated in Canada, (B) Canadian resource properties, (C) timber resource properties, and (D) options in respect of, or interests in, or for civil law rights in, property described in any of subparagraphs (ii)(A) to (C), whether or not the property exists. However, and despite the foregoing, in certain circumstances the common shares may be deemed to be "taxable Canadian property" under the Tax Act.

Holders whose common shares may be "taxable Canadian property" should consult their own tax advisers.

Certain United States Federal Income Tax Consequences

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 the Common Shares.

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 Common Shares 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 Common 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, 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 Common 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 Common Shares 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 Common Shares as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other integrated transaction; (f) acquired Common Shares in connection with the exercise of employee stock options or otherwise as compensation for services; (g) hold Common 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 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 Common Shares.

If an entity or arrangement that is classified as a partnership (or other pass-through entity) for U.S. federal income tax purposes holds Common 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 partners (or other owners). This summary does not address the tax consequences to any such entity or arrangement or partner (or other owner). Partners (or other 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 Common Shares.

Passive Foreign Investment Company Rules

If we are 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 Common Shares.

We believe that we were classified as a PFIC for the tax year ended December 31, 2019, and based on current business plans and financial expectations, we expect that we may be a PFIC for the tax year ending December 31, 2020 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, our 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 us. 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 we are 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 annually.

We 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, we 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 we are 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 Common 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 Common Shares.

Default PFIC Rules Under Section 1291 of the Code

If we are a PFIC, the U.S. federal income tax consequences to a U.S. Holder of the purchase of Common Shares and the acquisition, ownership, and disposition of Common Shares will depend on whether such U.S. Holder makes a "qualified electing fund" or "**QEF**" election under Section 1295 of the Code (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. 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 and (b) any excess distribution received on the Common 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, if shorter).

Under Section 1291 of the Code, any gain recognized on the sale or other taxable disposition of Common Shares of a PFIC (including an indirect disposition of shares of a Subsidiary PFIC), and any excess distribution received on such Common Shares (or a distribution by a Subsidiary PFIC to its shareholder that is deemed to be received by a U.S. Holder) must be ratably allocated to each day in a Non-Electing U.S. Holder's holding period for the Common 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 we are a PFIC for any tax year during which a Non-Electing U.S. Holder holds Common Shares, we will continue to be treated as a PFIC with respect to such Non-Electing U.S. Holder, regardless of whether we cease to be a PFIC in one or more subsequent tax years. If we cease to be a PFIC, a Non-Electing U.S. Holder may terminate this deemed PFIC status with respect to Common 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 were sold on the last day of the last tax year for which we were a PFIC.

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) our net capital gain, which will be taxed as long-term capital gain to such U.S. Holder, and (b) our 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 we are a PFIC, regardless of whether such amounts are actually distributed to such U.S. Holder by us. However, for any tax year in which we are 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 us 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 we were 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. If a U.S. Holder owns PFIC stock indirectly through another PFIC, separate QEF Elections must be made for the PFIC in which the U.S. Holder is a direct shareholder and the Subsidiary PFIC for the QEF rules to apply to both PFICs.

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, we cease to be a PFIC, the QEF Election will remain in effect (although it will not be applicable) during those tax years in which we were not a PFIC. Accordingly, if we become 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 we qualify as a PFIC.

U.S. Holders should be aware that there can be no assurances that we will satisfy the record keeping requirements that apply to a QEF, or that we 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 we are a PFIC. Thus, U.S. Holders may not be able to make a QEF Election with respect to their Common 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 we do not provide the required information with regard to us or any 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 only if the Common Shares are marketable stock. The Common Shares generally will be "marketable stock" if the Common 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 are "regularly traded" as described in the preceding sentence, the Common Shares are expected to be marketable stock. We believe that its Common Shares were "regularly traded" in the fourth calendar quarter of 2019 and expects that the Common Shares should be "regularly traded" in the first calendar quarter of 20202. However, there can be no assurance that the Common Shares will be "regularly traded" in the current or any 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.

A U.S. Holder that makes a Mark-to-Market Election will include in ordinary income, for each tax year in which we are a PFIC, an amount equal to the excess, if any, of (a) the fair market value of the Common Shares, as of the close of such tax year over (b) such U.S. Holder's tax basis in the Common 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, over (ii) the fair market value of such Common 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 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, 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 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, 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 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 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 we are 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 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.

In addition, a U.S. Holder who acquires Common Shares from a decedent will not receive a “step up” in tax basis of such Common 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.

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

The following discussion describes the general rules applicable to the ownership and disposition of the Common 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

A U.S. Holder that receives a distribution, including a constructive distribution, with respect to a Common Share 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 our 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 we are 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 and thereafter as gain from the sale or exchange of such Common Shares (see “Sale or Other Taxable Disposition of Common Shares” below). However, we 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 us with respect to the Common Shares will constitute ordinary dividend income. Dividends received on Common Shares generally will not be eligible for the “dividends received deduction” generally applicable to corporations. Subject to applicable limitations and provided we are 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 us 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 we 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

Upon the sale or other taxable disposition of Common 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 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 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 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 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 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 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 COMMON SHARES. U.S. HOLDERS SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX CONSIDERATIONS APPLICABLE TO THEM IN THEIR OWN PARTICULAR CIRCUMSTANCES.

F. Dividends and Paying Agents

Not Applicable.

G. Statement by Experts

Not Applicable.

H. Documents on Display

We are subject to the informational requirements of the U.S. Exchange Act and file reports and other information with the SEC. You may read and copy any of our reports and other information at, and obtain copies upon payment of prescribed fees from, the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. In addition, the SEC maintains a Website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC at http://www.sec.gov. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

We are required to file reports and other information with the securities commissions in Canada. You are invited to read and copy any reports, statements or other information, other than confidential filings, that we file with the provincial securities commissions. These filings are also electronically available from the Canadian System for Electronic Document Analysis and Retrieval ("**SEDAR**") (www.sedar.com), the Canadian equivalent of the SEC's electronic document gathering and retrieval system.

As a foreign private issuer, we are exempt from the rules under the U.S. Exchange Act prescribing the furnishing and content of proxy statements to shareholders.

I. Subsidiary Information

Not Applicable.

Item 11. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to credit risk, liquidity risk, interest rate and currency risk. Our board of directors has overall responsibility for the establishment and oversight of our risk management framework.

Credit risk

Our credit risk is primarily attributable to cash and cash equivalents and amounts receivable. We have no significant concentration of credit risk arising from operations. Cash and cash equivalents are held with reputable financial institutions, from which management believes the risk of loss to be remote. Financial instruments included in amounts receivable consists of HST tax due from the Federal Government of Canada and interest receivable from interest saving account and short-term promissory notes. Management believes that the credit risk concentration with respect to financial instruments included in amounts receivable is remote.

Liquidity risk

Our approach to managing liquidity risk is to ensure that it will have sufficient liquidity to meet liabilities when due and when appropriate will scale back its operations. We are a development stage company and are reliant on external fundingraising to support our operations. Once fumds have been raised, we manage our liquidity risk by investing in cash and cash equivalents to provide regular cash flow for current operations

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

The ability of the Company to arrange such financing in the future will depend in part upon prevailing capital market conditions and the business success of the Company. There can be no assurance that we will be successful in our efforts to arrange additional financing on terms satisfactory to the Company. If additional financing is raised by the issuance of shares or convertible securities from treasury, control of the Company may change, and shareholders may suffer additional dilution. If adequate funds are not available, or are not available on acceptable terms, we may not be able to take advantage of opportunities, or otherwise to resume and continue its technology development program.

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. We hold our cash in bank accounts or high interest savings accounts which have a variable rate of interest. We manage our interest rate risk by holding highly liquid short-term instruments and by holding our investments to maturity, where possible. For the years ended December 31, 2019, 2018 and 2017, we earned interest income of $115,584, $288,300 and $17,442, respectively. Therefore, a 1% change in the average interest rate for the years ended December 31, 2019, 2018 and 2017, would have a net impact on finance income of $62,071, $113,711 and $39,392, respectively.

Currency risk

Our functional currency is the U.S dollar. Expenditures transacted in foreign currency are converted to U.S dollars at the rate in effect when the transaction is initially booked. The gain or loss on exchange, when the transaction is settled, is booked to the Statement of Net and Comprehensive Loss. Management acknowledges that there is a foreign exchange risk derived from currency conversion and believes this risk to be low as we maintain a minimum balance of Canadian dollars.

A 5% strengthening of the U.S Dollar for the three years ended December 31, 2019, 2018 and 2017, as indicated below, against Canadian current assets and accounts payable and accrued liabilities including warrant liability would result in increased equity and increased profit of $32,541, $192,059 and $888,913. This analysis is based on foreign currency exchange rate variances that we consider to be reasonably possible at the end of the reporting periods.

5% Strengthening	December 31, 2019	December 31, 2018	December 31, 2017
CDN Current Assets	$ (19,687)	$ (10,155)	$ (20,301)
CDN Accounts Payable and accrued liabilities	52,228	202,214	909,214
Profit or Loss	**$ 32,541**	**$ 192,059**	**$ 888,913**

Item 12. Description of Securities Other than Equity Securities

A. – C.

Not Applicable.

D. American Depository Receipts

The Company does not have securities registered as American Depository Receipts.

PART II.

Item 13. Defaults, Dividend Arrearages and Delinquencies

The Company currently has payables due to its primary product development supplier (the "Primary Supplier") in excess of $6 million relating primarily to work performed prior to November 2019.

Although the Company's Primary Supplier has stopped all work with regard to the development of the Company's robotic surgical system, the Company and its Primary Supplier are in regular communication regarding the Company's capital resources.

Due to the Company not completing the October Offering and the resulting shortfall in capital available for the Company to pay the supplier, on October 3, 2019, the Company and its Primary Supplier entered into a letter agreement providing that until the Company has secured sufficient financing, the requirement that the Company maintain a deposit under an existing agreement 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, $2.0 million which had been paid to the supplier and held as a deposit under the original contract was applied toward the Company's payables for past services rendered by the 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 will then be required to maintain a deposit in that amount. Thereafter, once the Company has made full on time payment of all invoices for a six-month period, the deposit terms will revert to the terms of the existing original agreement.

Civil Claim

Additionally, the Company's relationship with another service provider (the "Service Provider") has deteriorated, resulting in the Service Provider serving the Company with a summons for civil action, indicating that the Service Provider has initiated a civil claim against the Company in the United States (the "Civil Claim"). The Civil Claim alleges that the Company has not paid the amounts owed under several invoices and the claim further alleges that the invoices total approximately $5.0 million. The Company has accrued and outstanding $2.9 million for invoices received. The Company has filed a defence against the claims of the Service Provider.

Please see "*Legal Proceedings*".

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

Not Applicable.

Item 15. Controls and Procedures

(a) Disclosure Controls and Procedures

The company's management, with the participation of the company's chief executive officer and chief financial officer, evaluated the effectiveness of the company's disclosure controls and procedures as of December 31, 2019. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of the company's disclosure controls and procedures as of December 31, 2019, the company's chief executive officer and chief financial officer concluded that, as of such date, the company's disclosure controls and procedures were effective to allow timely decisions regarding required disclosure.

(b) Management's Annual Report on Internal Control Over Financial Reporting

The Company's management, including the CEO and the CFO, is responsible for establishing and maintaining adequate internal control over financial reporting, and evaluating the effectiveness of the Company's internal control over financial reporting as at each fiscal year end. The CEO and the CFO have evaluated the design and effectiveness of internal controls over financial reporting based on the framework in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission 2013 Framework. Based on this evaluation, as at December 31, 2019, the Company believes that its internal controls over financial reporting were designed and operating effectively to provide reasonable, but not absolute, assurance that the objectives of the control system are met.

(c) Attestation Report of Registered Public Accounting Firm

This Annual Report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Under the Jumpstart Our Business & Startups Act ("**JOBS Act**"), emerging growth companies are exempt from Section 404(b) of the Sarbanes-Oxley Act, which generally requires public companies to provide an independent auditor attestation of management's assessment of the effectiveness of their internal control over financial reporting. The Company qualifies as an emerging growth company under the JOBS Act and is a non-accelerated filer and therefore has not included an independent auditor attestation of management's assessment of the effectiveness of its internal control over financial reporting.

(d) Changes in Internal Control over Financial Reporting

During the year ended December 31, 2019, no changes were made to the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 16.

Item 16A. Audit Committee Financial Expert

The Board of Directors has determined that John E. Barker (i) is an "audit committee financial expert" as defined in Item 407(d)(5)(ii) and (iii) of Regulation S-K and Rule 5605(c)(2)(A) of the Nasdaq Stock Market Rules; and (ii) is independent (as determined under Exchange Act Rule 10A-3 and Rule 5605(a)(2) of the Nasdaq Stock Market Rules).

Item 16B. Code of Ethics

The Company has adopted a Code of Business Conduct and Ethics that applies to directors, officers and employees of, and consultants and contractors to, the Company (the "**Code**"). The Code has been posted on the Company's website at www.titanmedicalinc.com. The Code meets the requirements for a "code of ethics" within the meaning of that term in Item 16B of the Form 20-F.

All waivers of the Code with respect to any of the employees, officers or directors covered by it will be promptly disclosed as required by applicable securities rules and regulations. During the fiscal year ended December 31, 2019, the Company did not waive or implicitly waive any provision of the Code with respect to any of the Company's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions.

Item 16C. Principal Accountant Fees and Services

The following table shows the aggregate fees billed to the Company by BDO Canada LLP, Chartered Professional Accountants and Licensed Public Accountants, the Company's independent registered public auditing firm, in each of the last two years.

Financial Year Ended	Audit Fees(1)	Audit-Related Fees(2)	Tax Fees(3)	All Other Fees(4)
December 31, 2019	$62,281	$59,344	$4,888	$116,893
December 31, 2018	$56,085	$31,534	—	$139,109

Notes:

(1) "Audit Fees" are fees billed by the Company's external auditor for services provided in auditing the Company's financial statements for the financial year.

(2) "Audit-Related Fees" are fees not included in Audit Fees that are billed by the auditor for assurance and related services that are reasonably related to performing the audit or reviewing the Company's interim financial statements.

(3) "Tax Fees" are fees billed by the auditor for professional services rendered for tax compliance, tax advice and tax planning.

(4) "All Other Fees" were paid for audit related services including regulatory filings and comfort letters in connection with prospectus offerings completed during the calendar year.

Pre-Approval of Audit and Non-Audit Services Provided by Independent Auditors

The Audit Committee pre-approves all audit services to be provided to the Company by its independent auditors.Non-audit services that are prohibited to be provided to the Company by its independent auditors may not be pre-approved. In addition, prior to the granting of anypre-approval, the Audit Committee must be satisfied that the performance of the services in question will not compromise the independence of the independent auditors. All non-audit services performed by the Company's auditor for the fiscal year ended December 31, 2019 werepre-approved by the Audit Committee of the Company. No non-audit services were approved pursuant to the de minimis exemption to thepre-approval requirement.

Item 16D. Exemptions from the Listing Standards for Audit Committees

None.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Item 16F. Changes in Registrant's Certifying Accountant

None.

Item 16G. Corporate Governance

The Company is a "foreign private issuer" as defined in Rule 3b-4 under Exchange Act and its common shares are listed on Nasdaq and the TSX. Rule 5615(a)(3) of Nasdaq Stock Market Rules permits foreign private issuers to follow home country practices in lieu of certain provisions of Nasdaq Stock Market Rules. A foreign private issuer that follows home country practices in lieu of certain provisions of Nasdaq Stock Market Rules must disclose ways in which its corporate governance practices differ from those followed by domestic companies either on its website or in the annual report that it distributes to shareholders in the United States. A description of the ways in which the Company's governance practices differ from those followed by domestic companies pursuant to Nasdaq standards are as follows:

Shareholder Meeting Quorum Requirement: Nasdaq Stock Market Rule 5620(c) ("**Rule 5620(c)**") requires that the minimum quorum requirement for a meeting of shareholders be 33 1/3 % of the outstanding common shares. In addition, Rule 5620(c) requires that an issuer listed on Nasdaq state its quorum requirement in its by-laws.

The Company has elected to follow Canadian practices consistent with the requirements of the TSX and the*Business Corporations Act* (Ontario) (the "**OBCA**") in lieu of Rule 5620(c). The Company's practices with regard to this requirement are not prohibited by the OBCA or the rules of the TSX. The Company's quorum requirement is set forth in its by-laws, which provide that a quorum for the transaction of business at any meeting of our shareholders is one person present in person or by proxy and holding or representing in the aggregate not less than 20% of our outstanding shares entitled to vote at such meeting.

Shareholder Approval Requirements: Nasdaq Stock Market Rule 5635(d) ("**Rule 5635(d)**") requires shareholder approval prior to a transaction involving the sale or issuance of a company's common stock (or securities convertible into or exercisable for its common stock): (i) at a price below the greater of book value or market value; and (ii) which together with sales by officers, directors, or substantial stockholders, is equal to 20% or more of the company's outstanding shares of common stock or 20% or more of the voting power prior to issuance.

The Company has elected to follow Canadian practices consistent with the requirements of the TSX and the OBCA in lieu of Rule 5635(d). The Company's practices with regard to this requirement are not prohibited by the OBCA or the rules of the TSX.

Advance Notice Requirement: Our corporate by-laws provide for an advance notice requirement in circumstances where nominations of persons for election to the board of directors are made by shareholders of the Company other than pursuant to: (a) a requisition to call a shareholders meeting made pursuant to the provisions of the OBCA; or (b) a shareholder proposal made pursuant to the provisions of the OBCA. The advance notice requirement fixes a deadline by which shareholders must submit a notice of director nominations to the Company prior to any annual or special meeting of shareholders where directors are to be elected and sets forth the information that a shareholder must include in the notice for it to be valid. In the case of an annual meeting of shareholders, notice to the Company must be given not less than 30 and not more than 65 days prior to the date of the annual meeting; provided, however, that in the event that the annual meeting is to be held on a date that is less than 40 days after the date on which the first public announcement of the date of the annual meeting was made, notice may be made not later than the close of business on the 10th day following such public announcement. In the case of a special meeting of shareholders (which is not also an annual meeting), notice to the Company must be given not later than the close of business on the 15th day following the day on which the first public announcement of the date of the special meeting was made.

Item 16H. Mine Safety Disclosure.

Pursuant to Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, issuers that are operators, or that have a subsidiary that is an operator, of a coal or other mine in the United States are required to disclose in their periodic reports filed with the SEC information regarding specified health and safety violations, orders and citations, related assessments and legal actions, and mining-related fatalities with respect to mining operations and properties in the United States that are subject to regulation by the Federal Mine Safety and Health Administration ("**MSHA**") under the Federal Mine Safety and Health Act of 1977 (the "**Mine Act**"). During the year ended December 31, 2019, the Company had no mines in the United States or elsewhere that were subject to regulation by the MSHA under the Mine Act.

PART III.

Item 17. Financial Statements

See "Item 18 – Financial Statements".

Item 18. Financial Statements

The Company's financial statements are stated in U.S. Dollars and are prepared in accordance with IFRS.

The following financial statements pertaining to the Company are filed as part of this Annual Report:

- Independent Auditor' Report re 2019 and 2018 dated March 30, 2020;
- Balance Sheets as at December 31, 2019 and 2018;
- Statements of Net and Comprehensive Loss for the years ended December 31, 2019 and 2018;
- Statement of Shareholders' Equity and Deficit for the years ended December 31, 2019 and 2018;
- Statements of Cash Flows for the years ended December 31, 2019 and 2018;
- Notes to the Financial Statements for the years ended December 31, 2019 and 2018;
- Independent Auditor' Report – re 2018 and 2017 updated to March 30, 2020;
- Balance Sheets as at December 31, 2018 and 2017;
- Statements of Net and Comprehensive Loss for the years ended December 31, 2018 and 2017;

- Statement of Shareholders' Equity and Deficit for the years ended December 31, 2018 and 2017;
- Statements of Cash Flows for the years ended December 31, 2018 and 2017;
- Notes to the Financial Statements for the years ended December 31, 2018 and 2017 including subsequent events from January 1, 2019 to March 30, 2020.

TITAN MEDICAL INC.
Financial Statements
Years Ended December 31, 2019 and 2018

(IN UNITED STATES DOLLARS)

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Report of Independent Registered Public Accounting Firm

To the Shareholders of Titan Medical Inc.

Opinion on the Financial Statements

We have audited the accompanying financial statements of Titan Medical Inc. (the "Company"), which comprise the balance sheets as of December 31, 2019, and 2018 the related statements of changes in shareholders' equity and deficit, net and comprehensive loss, and cash flow for the years ended December 31, 2019, and 2018 and the related notes including a summary of significant accounting policies and other explanatory information (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019, and 2018 and the results of their operations and their cash flows for the years ended December 31, 2019**,** and 2018 in conformity with International Financial Reporting Standards (IFRSs) as issued by International Accounting Standards Board ("IASB").

Going Concern Uncertainty

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses from operations and has a net capital deficiency that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. Further, we are required to be independent of the Company in accordance with the ethical requirements that are relevant to our audits of the financial statements in Canada and to fulfill our other ethical responsibilities in accordance with these requirements.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

(signed) BDO Canada LLP

Chartered Professional Accountants, Licensed Public Accountants
Toronto, Canada

March 30, 2020

We have served as the Company's auditor since 2010.

TITAN MEDICAL INC.
Balance Sheets
As at December 31, 2019 and 2018
(In U.S. Dollars)

	Note	December 31, 2019	December 31, 2018
Assets			
Current Assets:			
Cash and cash equivalents		$ 814,492	$ 11,471,243
Amounts receivable		84,097	143,225
Deposits	9	481,400	8,541,630
Prepaid expense		369,453	586,581
Total Current Assets		$ 1,749,442	$ 20,742,679
Right of use assets - Leases	3	30,394	—
Patent Rights	4	1,601,745	1,172,485
Total Assets		**$ 3,381,581**	**$ 21,915,164**
Liabilities			
Current Liabilities:			
Accounts payable and accrued liabilities	5	$ 11,412,896	$ 6,447,888
Current portion of lease liability	3	21,071	—
Warrant liability	6	3,621,444	11,250,167
Total Current Liabilities		**$ 15,055,411**	**$ 17,698,055**
Long-term lease liability	3	$ 8,001	$ —
Total Liabilities		**$ 15,063,412**	**$ 17,698,055**
Shareholders' Equity / (Deficiency)			
Share Capital	7	$ 194,859,415	$ 170,502,394
Contributed Surplus		8,303,527	6,652,409
Deficit		(214,844,773)	(172,937,694)
Total Equity / (Deficiency)		**$ (11,681,831)**	**$ 4,217,109**
Total Liabilities and Equity / (Deficiency)		**$ 3,381,581**	**$ 21,915,164**

Going Concern (Note 1(d))

Commitments (Note 9)

Subsequent events (Note 14)

See notes to financial statements

Approved on behalf of the Board:

"signed"	*"signed"*
Charles Federico	**David McNally**
Chairman	**President and CEO**

TITAN MEDICAL INC.
Statements of Net and Comprehensive Loss
For the Years Ended December 31, 2019 and 2018
(In U.S. Dollars)

	Note	Year Ended December 31, 2019	Year Ended December 31, 2018
Revenue:		**$ —**	**$ —**
Expenses:			
Amortization		$ 32,555	$ 29,041
Consulting fees		1,136,146	785,128
Stock based compensation	7b	1,651,119	1,505,625
Insurance		480,362	252,514
Management salaries and fees		2,547,484	2,683,187
Marketing and investor relations		289,350	231,032
Office and general		436,051	412,039
Professional fees		943,535	485,639
Rent		58,064	97,782
Research and Development		51,418,056	32,858,339
Travel		272,594	350,016
Interest charges		422,989	—
Foreign exchange (gain)/loss		37,972	(979,894)
		$ 59,726,277	**$ 38,710,448**
Finance Income (cost):			
Interest		$ 115,584	$ 288,300
Gain on change in fair value of warrants	2(h), 6	19,800,645	17,095,220
Warrant liability issue cost	2(h)	(2,097,031)	(1,312,344)
		$ 17,819,198	**$ 16,071,176**
Net and Comprehensive Loss For The Year		**$ 41,907,079**	**$ 22,639,272**
Basic and Diluted Loss Per Share		**$ (1.37)**	**$ (1.36)**
Weighted Average Number of Common Shares Basic and Diluted		**30,689,545**	**16,635,092**

See notes to financial statements

TITAN MEDICAL INC.
Statement of Shareholders' Equity and Deficit
For the Years Ended December 31, 2019 and 2018
(In U.S. Dollars)

	Note	Share Capital Number	Share Capital Amount	Contributed Surplus	Warrants	Deficit	Total Equity / (Deficiency)
Balance - December 31, 2017		12,686,723	$154,016,519	$5,146,784	$ 741,917	$(150,298,422)	$ 9,606,798
Issued pursuant to agency agreement		8,975,126	16,915,394	—	—	—	16,915,394
Share issue expense			(1,297,668)	—	—	—	(1,297,668)
Issued Other		7,500	66,234	—	—	—	66,234
Warrants exercised during the year		6,500	59,998	—	—	—	59,998
Warrants expired during the year		—	741,917	—	(741,917)	—	—
Stock based compensation		—	—	1,505,625	—	—	1,505,625
Net and Comprehensive loss		—	—	—	—	(22,639,272)	(22,639,272)
Balance - December 31, 2018		21,675,849	$170,502,394	$6,652,409	$ —	$(172,937,694)	$ 4,217,109
Balance - December 31, 2018		21,675,849	$170,502,394	$6,652,409	$ —	$(172,937,694)	$ 4,217,109
Issued pursuant to agency agreement	7a	8,455,882	13,717,131	—	—	—	13,717,131
Issued pursuant to private placements	7a	8,757,444	5,727,971	—	—	—	5,727,971
Share issue expense			(2,090,124)	—	—	—	(2,090,124)
Warrants exercised during the year	7a	1,018,506	7,002,043		—	—	7,002,043
Stock based compensation	7b	—	—	1,651,118	—	—	1,651,118
Net and Comprehensive loss		—	—	—	—	(41,907,079)	(41,907,079)
Balance - December 31, 2019		39,907,681	$194,859,415	$8,303,527	$ —	$(214,844,773)	$(11,681,831)

See notes to financial statements

TITAN MEDICAL INC.
Statements of Cash Flows
For the Years Ended December 31, 2019 and 2018
(In U.S. Dollars)

	Note	Year Ended December 31, 2019	Year Ended December 31, 2018
Cash provided by (used in):			
Operating activities:			
Net loss for the year		$ (41,907,079)	$ (22,639,272)
Items not involving cash:			
Amortization		32,555	29,041
Stock based compensation	7(b)	1,651,119	1,505,625
Other share compensation		—	66,234
Warrant liability-fair value adjustment	6	(19,800,645)	(17,095,220)
Warrant liability-foreign exchange adjustment		17,687	(984,462)
Non-cash issuance costs		744,501	—
Changes in non-cash working capital items:			
Amounts receivable, prepaid expenses and deposits		8,336,486	(6,508,259)
Accounts payable and accrued liabilities		4,965,008	4,229,536
Cash used in operating activities		$ (45,960,368)	$ (41,396,777)
Financing activities:			
Net proceeds from issuance of common shares and warrants		35,766,754	27,158,114
Repayment of lease liabilities	3	(5,100)	—
Cash provided by financing activities		$ 35,761,654	$ 27,158,114
Investing Activities:			
Cost of Patents		(458,037)	(420,587)
Cash used in investing activities		$ (458,037)	$ (420,587)
Decrease in cash and cash equivalents		(10,656,751)	(14,659,250)
Cash and cash equivalents, beginning of the year		11,471,243	26,130,493
Cash and cash equivalents, end of the year		**$ 814,492**	**$ 11,471,243**
Cash and cash equivalents comprise:			
Cash		$ 141,768	$ 100,130
Cash equivalents		672,724	11,371,113
		$ 814,492	$ 11,471,243

See notes to financial statements

1. *DESCRIPTION OF BUSINESS*

Nature of Operations:

Titan Medical Inc.'s ("Titan" or the "Company"), business continues to be in the research and development stage and is focused on the continued research and development of the next generation surgical robotic platform. In the near term, the Company will continue efforts to complete product development and proceed to pre-clinical and confirmatory human studies and satisfaction of appropriate regulatory requirements. Upon receipt of regulatory approvals, the Company will transition from the research and development stage to the commercialization stage. The completion of these latter stages will be subject to the Company receiving additional funding in the future.

The Company is incorporated in Ontario, Canada in accordance with the Business Corporations Act. The address of the Company's corporate office and its principal place of business is Toronto, Canada.

Basis of Preparation:

(a) Statement of Compliance

These financial statements for the year ended December 31, 2019 and December 31, 2018 have been prepared in accordance with International Accounting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

The financial statements were authorized for issue by the Board of Directors on March 30, 2020.

(b) Basis of Measurement

These financial statements have been prepared on the historical cost basis except for the revaluation of the warrant liability, which is measured at fair value.

(c) Functional and Presentation Currency

These financial statements are presented in United States dollars ("U.S."), which is the Company's functional and presentation currency.

(d) Going Concern

These financial statements have been prepared in accordance with accounting principles applicable to a going concern, which contemplates that the Company will be able to realize its assets and settle its liabilities in the normal course as they come due during the normal course of operations for the foreseeable future. The Company has shareholders' deficiency of $11,681,831 and current year losses of $41,907,079. The Company currently does not generate any revenue 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.

(In U.S. Dollars)

1. DESCRIPTION OF BUSINESS (continued)

(e) Use of Estimates and Judgements

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of provisions at the date of the financial statements and the reported amount of expenses during the year. Financial statement items subject to significant judgement include, the measurement of stock-based compensation and the fair value estimate of the initial measurement of new warrant liabilities and the remeasurement of unlisted warrants. While management believes that the estimates and assumptions are reasonable, actual results may differ.

The Black-Scholes model used by the Company to determine fair values of stock options and warrants was developed for use in estimating the fair value of the stock options and warrants.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Cash and Cash Equivalents

Cash and cash equivalents include cash balances and amounts on deposit in interest saving accounts with interest rates of less than 1%.

(b) Furniture and Equipment

Furniture and equipment are recorded at cost less accumulated amortization and accumulated impairment losses, if any. The Company records amortization using the straight-line method over the estimated useful lives of the capital assets as follow:

a) Computer Equipment	3 years
b) Furniture and Fixtures	3 - 5 years
c) Leasehold Improvements	Term of the lease

(c) Leases - Right-of-use Assets

In the current year, the Company has applied IFRS 16 Leases (as issued by the IASB effective January 1, 2019). IFRS 16 introduces new or amended requirements with respect to lease accounting. It introduces significant changes to lessee accounting by removing the distinction between operating and finance leases and requiring the recognition of a right-of-use asset and a lease liability at the lease commencement for all leases, except for short-term leases and leases of low value assets.

The Company assesses whether a contract is or contains a lease, at inception of a contract. The Company recognizes aright-of-use asset and a corresponding lease liability with respect to all lease agreements in which it is the lessee, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of low value assets.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the rate implicit in the lease. If this rate cannot be readily determined, the Company uses a reasonable commercial borrowing rate. For the year ended December 31, 2019, the Company used a 6% discount rate.

As at January 1, 2019, the date of initial application of IFRS 16, the Company had no leases with terms greater than 12 months. As such, the Company's initial application of IFRS 16 is as of November 1, 2019, the date of commencement of its first long-term lease. The Company is not subject to retrospective application of IFRS 16 nor restatement of comparative information.

In applying IFRS 16, the Company:

a) recognizes right-of-use assets and lease liabilities in the statement of financial position, initially measured at the present value of future lease payments;

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

b) recognizes amortization of right-of-use assets and interest on lease liabilities in the statement of profit or loss; and

c) separates the total amount of cash paid into a principal portion (presented within financing activities) and interest (presented within operating activities) in the consolidated statement of cash flows.

Lease payments included in the measurement of the lease liability comprise fixed lease payments less any lease incentives (e.g. free rent period).Non-lease components outlined in the lease are accounted as operating expenses in the period charged. Note, IFRS does permit a lessee not to separate non-lease components and instead account for any lease and associated non-lease components as a single arrangement. The Company has not used this expedient.

For short-term leases (lease term of 12 months or less) and leases oflow-value assets (such as personal computers and office furniture), the Company has opted to recognize a lease expense on a straight-line basis as permitted by IFRS 16. This expense is presented, if any, within general expenses in the statement of profit or loss.

(d) Patent Rights

Patent rights are recorded at cost less accumulated amortization and accumulated impairment loss. Straight line amortization is provided over the estimated useful lives of the assets, as prescribed by the granting body, which range up to twenty years.

(e) Impairment of Long-Lived Assets

The Company reviews computer equipment, furniture and equipment, leasehold improvements,right-of-use assets and patent rights for objective evidence of impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable. Recoverability is measured by comparison of the asset's carrying amount to the asset's recoverable amount, which is the greater of fair value less cost to sell and value in use. Value in use is measured as the expected future discounted cash flows expected to be derived from the asset. If the carrying value exceeds the recoverable amount, the asset is written down to the recoverable amount. The Company's patent rights were tested for impairment in the current year and no adjustment to carrying value was required.

(f) Deferred Income Taxes

The Company uses the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities, unused tax losses and income tax reductions, and are measured using the substantively enacted tax rates and laws that will be in effect when the differences are expected to reverse. A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. Management has determined not to recognize its net deferred tax assets, as it is not considered probable that future tax benefits will be realized.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(g) Foreign Currency

Transactions in currencies other than U.S. dollars are translated at exchange rates in effect at the date of the transactions. Foreign exchange differences arising on settlement are recognized separately in net and comprehensive loss. Monetary year end balances are converted to U.S. dollars at the rate in effect at that time. Non-monetary items in a currency other than U.S. dollars that are measured in terms of historical cost are translated using the exchange rate at the date of transaction or date of adoption of U.S. functional currency, whichever is later. Foreign exchange gains and losses are included in net and comprehensive loss.

(h) Warrant Liability

Certain of the Company's warrants have exercise prices that are not fixed and as such in accordance with IAS 32, they must be recorded as a derivative financial liability. This applies both in the case where the Company's warrants are denominated in a currency (Canadian dollars) other than the Company's functional currency (U.S. dollars), and when a warrant is issued with a cashless exercise option. In each case, these warrants are initially measured at fair value and subsequent changes in fair value are recorded through Net and Comprehensive Loss for the year. A proportional amount of costs associated with the issue of shares and warrants is allocated to the warrants and recorded through Net and Comprehensive Loss for the year. At each balance sheet date, the Company reviews the classification of each Warrant Liability to determine whether the appropriate classification remains with Liabilities or requires reclassification to Equity.

At each balance sheet date, the Warrant Liability of listed warrants is adjusted to fair value measured at the market price of the listed warrants and the Warrant Liability of unlisted warrants is adjusted to fair value using the Black-Scholes model. Prior to March 31, 2019, the Black-Sholes model for the unlisted warrants was determined using a comparable warrant quoted in an active market, adjusted for differences in the terms of the warrant. Since March 31, 2019, it was determined that the comparable warrant was no longer an effective benchmark and the Company began to use the market price and volatility of the Company's common shares adjusted for differences in the terms of the warrant.

(i) Fair Value Measurement

The accounting guidance for fair value measurements prioritizes the inputs used in measuring fair value into the following hierarchy:

Level 1 - Quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 - Inputs other than quoted prices included within Level 1 that are directly or indirectly observable:

Level 3 - Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

The fair value of the warrant liability relating to listed and unlisted warrants is initially based on Level 2 significant observable inputs and at subsequent dates is adjusted using Level 1 inputs for listed warrants and Level 2 inputs for unlisted warrants.

(j) Stock Based Compensation

IFRS 2 requires options granted to employees and others providing similar services to be measured at the fair value of goods or services received, unless that fair value cannot be estimated reliably. If the entity cannot estimate reliably the fair value of the goods or services received, the entity shall measure the value and the corresponding increase in equity, indirectly, by reference to the fair value of the equity instruments granted, which the Company does using the Black-Scholes option pricing model. The fair value of the options granted is determined as at the grant date.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Stock options granted to non-employees are valued at the fair value of the goods or service received, measured at the date on which the goods are received, or the services rendered. If the entity cannot estimate reliably the fair value of the goods or services received, the entity shall measure the value and the corresponding increase in equity, indirectly, by reference to the fair value of the equity instruments granted, which the Company does using the Black-Scholes option pricing model. The fair value of the options granted is determined as at the grant date.

Stock options are issued to vest immediately or when used as a long-term incentive, are commonly issued over a vesting period of up to seven years. The expense related to options with a vesting period are recorded over the vesting period in accordance with the terms of the options.

(k) Research and Development Costs

Research and development activities undertaken with the prospect of gaining new scientific or technical knowledge and understanding are expensed as incurred. The costs of developing new products are capitalized as deferred development costs, if they meet the development capitalization criteria under IFRS. These criteria include the ability to measure development costs reliably, the product is technically, and commercially feasible, future economic benefits are probable, and the Company intends to and has sufficient resources to complete development and to use or sell the asset. To date, all the research and development costs have been expensed as the criteria for capitalization have not yet been met.

(l) Earnings (loss) per Share

Basic earnings (loss) per share are calculated using the weighted-average number of common shares outstanding during the year. Diluted earnings (loss) per share considers the dilutive impact of the exercise of outstanding stock options and warrants, as if the events had occurred at the beginning of the period or at a time of issuance, if later. Diluted loss per share has not been presented in the accompanying financial statements, as the effect would be anti-dilutive.

(m) Investment Tax Credits

As a result of incurring scientific research and development expenditures, management has estimated that there will be non-refundable federal and refundable and non-refundable provincial investment tax credits receivable following the completion of an audit process by tax authorities. Investment tax credits are recorded when received or when there is reasonable assurance that the credits will be realized. Upon recognition, amounts will be recorded as a reduction of research and development expenditures.

(n) Financial Instruments

Financial assets include cash and cash equivalents, and amounts receivable which are measured at amortized cost. Amounts receivable include HST recoverable and other receivables. Financial liabilities include accounts payable and accrued liabilities which are measured at amortized cost.

(o) Short-term Employee Benefits

Short-term employee benefit obligations including Company paid medical, dental and life insurance plans, are measured on an undiscounted basis and are expensed as the related service is provided.

(p) Provisions

A provision is recognized, if as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(q) Standards, Amendments and Interpretations not yet Effective

There are currently no amendments, revisions and new IFRS standards, which have been issued but not effective until annual periods beginning after December 31, 2019 that are expected to have a material impact on the Company.

(r) Adoption of New Accounting Standard

IFRS 16 Leases, supersedes the requirements in IAS 17,IFRIC-15 and SIC-17. The new standard was effective for annual periods beginning on or after January 1, 2019.

As of January 1, 2019, the Company was not party to any leases of greater than 12 months and as such was not required to make any restatements to its financial reports at January 1, 2019. The Company has implemented the new standard beginning with a new lease entered into during the current year. See Significant Accounting Policies **(c) Leases – Right-of-use Assets** above for further details.

(In U.S. Dollars)

3. LEASE ASSETS

For the year ended December 31, 2019	Cost	Accumulated Amortization	Net Book Value
Balance at December 31, 2018	$ —	$ —	$ —
Additions during the year	34,172	—	34,172
Amortization in the year	—	(3,778)	(3,778)
Balance at December 31, 2019	$34,172	$ (3,778)	$30,394

The Company entered into an 18-month lease for its corporate head office in Toronto, Ontario in November 2019. The Company recognized aright-of-use asset offset by a prepayment and a lease liability in the statement of financial position, initially measured at the present value of future lease payments (net of non-lease general expenses which are expensed as incurred).

For the period ended December 31, 2019, the Company has recognized $3,778 of amortization and $3,340 in interest expense relating to this lease and has repaid $5,100 of the lease liability.

On September 4, 2019, the Company entered into a lease agreement with a third party to lease certain office space in Chapel Hill, North Carolina. The term of the lease is 62 full months and the average monthly base rent is $8,320. The lease will commence on or about March 31, 2020, once the space is ready-for-use. Upon commencement, the Company shall recognize a right-of-use asset and a lease liability relating to this lease.

4. PATENT RIGHTS

For the year ended December 31, 2019	Cost	Accumulated Amortization & Impairment Losses	Net Book Value
Balance at January 1, 2018	$ 978,126	$ (203,901)	$ 774,225
Additions during the year	420,587	—	420,587
Amortization in the year	—	(22,327)	(22,327)
Balance at December 31, 2018	$1,398,713	$ (226,228)	$1,172,485
Additions during the year	458,037	—	458,037
Amortization in the year	—	(28,777)	(28,777)
Balance at December 31, 2019	$1,856,750	$ (255,005)	$1,601,745

5. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

The balance of accounts payable and accrued liabilities at December 31, 2019 is $11,412,896 (December 31, 2018 - $6,447,888). The majority of the payables relate to amounts owed to the Company's R&D suppliers amounting to $10,049,622, for legal and audit an amount of $560,904 and the balance relating to regular business operations.

Naglreiter Consulting Litigation

On October 16, 2019, Naglreiter Consulting, LLC ("Naglreiter") filed a Complaint for breach of

5. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES (continued)

contract against the Company in the U.S. District Court for the Southern District of Florida. The Complaint, which was served on the Company on October 24, 2019, alleges that the Company has not paid the amounts owed under several invoices and, further, that the invoices total approximately $5 million.

On December 5, 2019, the Company filed an Answer, Affirmative Defenses and Counterclaim denying the allegations, asserting defenses to the Complaint, and asserting counterclaims against Naglreiter for (i) breach of contract including that the services that were rendered by Naglreiter were not rendered in a satisfactory manner and that Naglreiter failed to return property paid for by the Company, (ii) fraudulent inducement, (iii) negligent misrepresentation, (iv) indemnification and (v) conversion for refusing to return Titan's property.

On February 13, 2020, Naglreiter filed an Amended Complaint against the Company to add a complaint of unjust enrichment alleging that Naglreiter had conferred benefits on the Company without the Company paying fair market value for them and asked the courts for a constructive trust over certain property of the Company in Naglreiter's possession.

On March 9, 2020, the Company filed an Answer and Affirmative Defenses to the Amended Complaint and an Amended Counterclaim, denying the allegations, asserting defenses to the Amended Complaint, and bringing additional counterclaims of (i) replevin to recover possession of personal property held by Naglreiter, (ii) civil theft for depriving the Company of its right to certain property in Naglreiter's possession and (iii) injunctive relief to have Naglreiter cease and desist the violation of confidentiality provisions in the parties' agreements.

The Company is seeking a return of property having a value of over $4 million as well as the return of amounts paid for work not done or inadequately done by Naglreiter. The Company intends to defend itself vigorously in this matter and pursue all relief to which it is entitled.

The Company has included in its accounts $2,889,626 for outstanding invoices relating to the period that Naglreiter was engaged with the Company.

6. WARRANT LIABILITY

	Year Ended December 31, 2019		Year Ended December 31, 2018	
	Number of Warrants	Amount	Number of Warrants	Amount
Opening Balance	13,901,859	$ 11,250,167	4,933,231	$ 17,849,460
Issue of warrants expiring, April 10, 2023	—	—	1,295,554	5,212,087
Issue of warrants expiring, August 10, 2023	—	—	7,679,574	6,297,251
Issue of warrants expiring, March 21, 2024	8,455,882	15,897,059	—	—
Warrants exercised during the year	(1,018,506)	(3,742,824)	(6,500)	(28,949)
Warrants expired during the year	(135,824)	—	—	—
Foreign exhange adjustment during the year	—	17,687	—	(984,462)
Fair value adjustment during the year	—	(19,800,645)	—	(17,095,220)
Ending Balance	21,203,411	$ 3,621,444	13,901,859	$ 11,250,167

7. SHARE CAPITAL

a) **Authorized:** unlimited number of common shares, no par

Issued: 39,907,681 (December 31, 2018: 21,675,849)

Exercise prices of units, certain warrants and options are presented in Canadian currency when they are exercisable in Canadian dollars unless otherwise noted.

On December 23, 2019, the Company entered into a common share purchase agreement (the "Aspire Agreement") with Aspire Capital Fund, LLC ("Aspire Capital") whereby Aspire Capital committed to purchase up to $35 million of common shares of Titan ("Common Shares") at Titan's request from time to time, until June 23, 2022 (the "Aspire Transaction"). On commencement of the Aspire Agreement, Titan issued to Aspire Capital 973,000 Common Shares, then issued and outstanding, as consideration for entering into the Aspire Agreement. The value of the Common Shares issued of $423,440, has been included in capital, offset by a fee valued at the same amount plus $35,122 for other costs incurred pursuant to the Aspire Transaction. Titan did not sell Common Shares to Aspire pursuant to the Aspire Agreement until after the year ended December 31, 2019. See Subsequent events Note 10.

On August 29, 2019, the Company entered into a common share purchase agreement (the "First Aspire Agreement") with Aspire Capital whereby Aspire Capital committed to purchase up to $35 million of common shares of Titan at Titan's request from time to time, until February 28, 2022. On commencement of the First 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 $3.0 million and issued to Aspire Capital 639,837 Common Shares, representing 1.9% of the Common Shares then issued and outstanding, as consideration for entering into the First Aspire Agreement. Northland Securities, Inc. acted as the Company's agent and financial advisor in connection with the offering and pursuant to an agency agreement, was paid a cash fee of $160,000. Gross proceeds of $3.0 million, net of costs and fees of $417,113, was included in capital. Subsequent to August 29, 2019 and subject to the First Aspire Agreement, the Company issued Common Shares to Aspire as outlined in the following table:

(In U.S. Dollars)

7. ***SHARE CAPITAL (continued)***

Grant Date	Common shares issued	Value
August 30, 2019	2,417,162	$3,000,000
November 8, 2019	100,000	42,560
November 8, 2019	100,000	42,560
November 12, 2019	100,000	42,970
November 12, 2019	100,000	42,000
November 13, 2019	100,000	42,970
November 14, 2019	300,000	128,910
November 15, 2019	2,500,000	1,074,250
November 19, 2019	2,067,282	888,311
	7,784,444	$5,304,531

On March 21, 2019, Titan completed an offering of securities made pursuant to an agency agreement dated March 18, 2019 between the Company and Bloom Burton Securities Inc. (“Bloom Burton”). The Company sold 8,455,882 units under the offering at a price of US $3.40 per Unit for gross proceeds of approximately $28,750,000 ($25,426,744 net of closing cost including cash commission of $2,012,500). Each unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of US $4.00 and expiring March 21, 2024. The warrants were valued at $15,897,059 based on the value determined by the Black-Scholes model and the balance of $12,852,941 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to Bloom Burton, broker warrants were issued to Bloom Burton which entitle the holder to purchase 591,911 Common Shares at a price of US $3.40 per share prior to expiry on March 21, 2021. The broker warrants were valued using the Black-Scholes model and the value of $864,190 was accounted for as an increase in the closing costs and allocated between the shares and the warrants.

During the quarter ended March 31, 2019, 1,018,506 warrants were exercised for total proceeds of $3,259,219. The fair value of the exercised warrants was $3,742,824 which was reclassed from warrant liability to common stock. No additional warrants were exercised during 2019.

On August 10, 2018, Titan Completed an offering of securities made pursuant to an agency agreement dated August 7, 2018 between the Company and Bloom Burton. The Company sold 7,679,574 units under the offering at a price of US $2.50 per unit for gross proceeds of approximately $19,198,935 ($17,464,711 net of closing cost including cash commission of $1,343,925). Each unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of US $3.20 per share and expiring August 10, 2023. The warrants were valued at $6,297,251 based on the value determined by the Black-Scholes model and the balance of $12,901,684 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to Boom Burton, broker warrants were issued to Bloom Burton which entitle the holder to purchase 537,570 Common Shares at a price of US $2.50 per share prior to expiry on August 10, 2020.

7. SHARE CAPITAL (continued)

On June 19, 2018, a share consolidation of 30:1 was completed and the Company's outstanding common shares were adjusted from 419,888,250 to 13,996,275. All references to the common shares, warrants and stock options, prior to June 20, 2018, have been updated in the notes to reflect the 30:1 share consolidation.

On April 10, 2018, Titan completed an offering of securities made pursuant to an agency agreement dated April 3, 2018 between the Company and Bloom Burton. The Company sold 1,126,664 units under the offering at a price of CDN $9.00 per unit for gross proceeds of approximately $8,035,941 ($7,211,320 net of closing costs including cash commission of $562,516). Each unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of CDN $10.50 and expiring April 10, 2023. The warrants were valued at $4,553,700 based on the value determined by the Black-Scholes model and the balance of $3,482,241 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to Bloom Burton, broker warrants were issued to Bloom Burton which entitle the holder to purchase 78,867 Common Shares at a price of CDN $9.00 per share prior to expiry on April 10, 2020.

On May 10, 2018, Titan announced the completion of the over-allotment option, granted to Bloom Burton as agent for its offering, at a price of CDN $9.00 per unit, completed on April 10, 2018, was exercised and the Company sold an additional 168,888 units at the offering price for additional gross proceeds of $1,189,856 ($1,100,238 net of closing costs including cash commission of $76,988). Each unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of CDN $10.50 and expiring April 10, 2023. The warrants were valued at $658,387 based on the value determined by the Black-Scholes model and the balance of $531,469 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to Bloom Burton, broker warrants were issued to Bloom Burton, which entitle the holder to purchase 10,928 Common Shares at a price of CDN $9.00 per share prior to expiry on April 10, 2020.

b) Stock Options and Compensation Options

On May 29, 2019, the shareholders of Titan approved an increase of its reserve for options from 10% and set aside up to 15% of the issued and outstanding shares of Titan for granting of options to employees, officers, consultants and advisors. At December 31, 2019, 5,986,152 common shares (December 31, 2018: 1,241,803) were available for issue in accordance with the Company's stock option plan (the "Option Plan"). The terms of these options are determined by the Board of Directors.

For the period ended December 31, 2019, $1,651,119 of stock-compensation expense was recognized (December 31, 2018 - $ 1,505,625).

On May 29, 2019, the shareholders approved amendments to the exercise prices of options previously granted to executive officers and other employees of the Company under the Option Plan. The exercise price was amended to be US $3.40 (CDN $4.54) per option, being the higher of the March 21, 2019 offering price of US $3.40 per share and the five-day volume weighted average price as determined as of the close of business on May 28, 2019.

(In U.S. Dollars)

7. SHARE CAPITAL (continued)

In accordance with IFRS 2, the options affected by the amendments were revalued just prior to the amendment and just after the amendment based on the values determined by the Black-Scholes model. The incremental value of CDN $622,460 (US $475,622) was recognized as stock based compensation with CDN $382,390 (US $292,184) recognized immediately and CDN $240,070 (US $183,437) to be amortized and recognized as stock-based compensation over the remaining vesting period in accordance with the vesting schedule of each particular option agreement.

The amended fair value of all affected share-based payment plans was measured based on the Black-Scholes formula. Expected volatility was estimated by considering historic average share price volatility. The weighted average inputs used in the measurement of fair values at the amendment date of the share-based option plan are as follows:

	May 29, 2019 before the amendments	May 29, 2019 after the amendments
Fair Value calculated	CDN $0.01-$1.40	CDN $1.06-$2.10
Share price at grant	CDN $3.47	CDN $3.47
Exercise price	CDN $12.90-$51.60	CDN $4.54
Expected Volatility	98.6%-99.4%	98.6%-99.4%
Expected Option Life	1.0-3.5 years	1.0-3.5 years
Expected dividends	Nil	Nil
Risk free interest rate (based on government bonds)	1.48%-1.57%	1.48%-1.57%

(In U.S. Dollars)

7. SHARE CAPITAL (continued)

A summary of the status of the Company's outstanding stock options as of December 31, 2019 and December 31, 2018 and changes during the periods ended on those dates is presented in the following table:

Stock Options - CDN $ denominated

Year ended	December 31, 2019		December 31, 2018	
	Number of Stock Options	Weighted average Exercise Price (CDN)	Number of Stock Options (1)	Weighted average Exercise Price (CDN)
Balance Beginning	875,433	$ 18.20	591,609	$ 21.30
Granted	35,719	4.54	322,517	13.51
Expired/Forfeited	(50,773)	31.79	(38,693)	24.90
Balance Ending	860,379	$ 5.89	875,433	$ 18.20

Stock Options - US $ denominated

Year ended	December 31, 2019		December 31, 2018	
	Number of Stock Options	Weighted average Exercise Price (USD)	Number of Stock Options (1)	Weighted average Exercise Price (USD)
Balance Beginning	50,349	$ 1.55	—	$ —
Granted	843,693	2.72	50,349	1.55
Expired/Forfeited	(40,000)	3.72	—	—
Balance Ending	854,042	$ 2.65	50,349	$ 1.55

1. After giving consideration for 30:1 share consolidation effected June 20, 2018.

(In U.S. Dollars)

7. ***SHARE CAPITAL (continued)***

The weighted-average remaining contractual life and weighted-average exercise price of options outstanding and of options exercisable as at December 31, 2019 are as follows:

Canadian Dollar Denominated Options

Exercise Price (CDN)	Number Outstanding	Weighted-average remaining contractual life (years)	Options Exercisable
$3.28	31,498	5.67	31,498
$4.50	18,936	3.28	18,936
$4.54	743,122	6.76	296,807
$4.80	3,040	0.71	3,040
$7.49	5,590	5.52	5,590
$9.00	11,481	5.52	11,481
$9.60	1,105	0.77	1,105
$11.70	6,667	0.94	6,667
$12.00	1,948	0.93	1,948
$30.00	28,260	1.65	28,260
$30.60	2,096	0.98	2,096
$32.40	810	1.08	810
$45.30	560	0.61	560
$51.60	5,266	0.44	5,268
	860,379	**4.37**	**414,066**

US Dollar Denominated Options

Exercise Price (USD)	Number Outstanding	Weighted-average remaining contractual life (years)	Options Exercisable
$1.55	50,349	1.97	50,349
$2.20	469,420	6.53	2,165
$3.40	294,273	6.37	197,273
$3.72	40,000	2.69	0
	854,042	**6.28**	**249,787**
Total	**1,714,421**	**5.32**	**663,853**

The weighted average exercise price of Canadian dollar denominated options outstanding is CDN $5.89 and CDN $7.35 for options that are exercisable. The weighted average exercise price of US dollar denominated options outstanding is US $2.65 and US $3.02 for options that are exercisable.

(In U.S. Dollars)

7. SHARE CAPITAL (continued)

Options are granted to Directors, Officers, Employees and Consultants at various times. Options are to be settled by physical delivery of shares. Options and the terms of each issue over the year ended December 31, 2019 are outlined below.

Grant date/ Recipient	Number of Options	Vesting Conditions	Contractual Life of Options
February 14, 2019, options granted to a Consultant	40,000	Options may vest over a 15-month vesting schedule	Cancelled
May 29, 2019, options granted to a Director	253,000	Options vest over a specified vesting period not exceeding 4 years	7 years
June 28, 2019, options granted to an Employee	10,000	Options vest as to 1/3 of the total number of Options granted, every year from Grant Date	7 years
July 18, 2019, options granted to a Director	25,719	Options vest immediately	7 years
July 19, 2019, options granted to an Employee	467,255	Options vest as to 1/4 of the total number of Options granted, every year from Grant Date	7 years
July 19, 2019, options granted to a Consultant	2,165	Options vest as to 1/3 of the total number of Options granted, every year from Grant Date	7 years
July 19, 2019, options granted to a Director	41,273	Options vest immediately	7 years
September 9, 2019, options granted to a Consultant	40,000	Options vest over a 15-month vesting schedule subject to achieving certain milestones.	2.5 years

Inputs for Measurement of Grant Date Fair Values

The grant date fair value of all share-based payment plans was measured based on the Black-Scholes model. Expected volatility was estimated by considering historic average share price volatility. The weighted average inputs (in CDN$ or US$ as per the grant) used in the measurement of fair values at grant date of the share-based option plan are as follows:

	2019	2019	2018
Fair Value calculated	US $1.48	CDN $1.61	CDN $5.99
Share price at grant	US $2.36	CDN $2.90	CDN $10.79
Exercise price	US $2.72	CDN $4.54	CDN $11.97
Expected Option Life	3.5 years	3.4 years	3 years
Risk free interest rate (based on government bonds)	1.50%	1.43%	1.90%
Expected Volatility	97.90%	98.10%	90.12%
Expected dividends	Nil	Nil	Nil

(In U.S. Dollars)

7. SHARE CAPITAL (continued)

c) Warrants

In addition to the warrants accounted for as a liability (see Note 6), at December 31, 2019, the Company has 1,219,276 broker warrants that are issued, outstanding and exercisable (December 31, 2018 - 786,183). These broker warrants expire between April 10, 2020 and March 21, 2021 (December 31, 2018 - broker warrants had expiry dates between March 16, 2019 and August 10, 2020).

8. *INCOME TAXES*

a) Current Income Taxes

A reconciliation of combined federal and provincial corporate income taxes at the Company's effective tax rate of 26.5% (2018 - 26.5%).

	December 31, 2019	December 31, 2018
Net Loss before income taxes	$ (41,907,079)	$ (22,639,272)
Income taxes at statutory rates	$ (11,105,376)	$ (5,999,407)
Tax effect of expenses not deductible for income tax purposes:		
Tax/FX rate changes and other adjustments	—	—
Permanent differences	(4,800,780)	(4,374,564)
Unrecognized share issue costs	(625,220)	(354,072)
Tax/foreign currency rate changes and other adjustments	93,724	—
Total tax recovery	(16,437,652)	(10,728,043)
Tax recovery not recognized	16,437,652	10,728,043
	$ —	$ —

b) Deferred Income Taxes

Deferred income tax assets and liabilities result primarily from differences in recognition of certain timing differences that give rise to the Company's future tax assets (liabilities) and are as follows:

	December 31, 2019	December 31, 2018
Non-Capital Losses	$ 63,740,497	$ 47,679,897
Qualifying Research and Development expenditures	1,493,309	1,493,309
Share issue costs and other	1,999,584	1,622,533
Total tax assets	67,233,390	50,795,739
Tax assets not recognized	(67,233,390)	(50,795,739)
Net deferred tax assets	$ —	$ —

In assessing the realizability of deferred tax assets, management considers whether it is probable that some or all the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. Management, based on IFRS criteria, has determined, at this time, not to recognize its deferred tax assets.

(In U.S. Dollars)

8. INCOME TAXES (continued)

c) Losses carried forward

The Company has non-capital losses of approximately $240,594,715 available to reduce future income taxes. The non-capital losses expire approximately as follows:

2027	$ 786,557
2028	169,954
2029	186,708
2030	2,003,594
2031	12,735,836
2032	7,260,729
2033	8,856,497
2034	15,819,741
2035	43,934,918
2036	28,310,254
2037	19,604,159
2038	40,255,192
2039	60,670,576
	$240,594,715

The Company has accumulated Qualifying Research and Development expenses of $5,635,128 from prior years research and development. These expenditures may be carried forward indefinitely and used to reduce taxable income in future years.

As a result of a Canada Revenue Agency (CRA) audit completed in 2017 and 2016, regarding Titan's 2012 and 2011 SR&ED claim, the 2012 loss of $6,517,436 has been adjusted to $7,260,729 and the 2011 loss of $9,423,694 has been adjusted to $12,735,836. The qualifying SR&ED expenditures has also been adjusted from $9,439,430 to $5,635,128. CRA concluded that the claimed work did not satisfy the SR&ED criteria. Titan is appealing this decision by CRA.

d) Investment Tax Credits

At December 31, 2019, the Company has $1,167,560 (2018 - $1,167,560) of unclaimed investment tax credits available to reduce federal income taxes payable in future years. If not utilized, these investment tax credits will start expiring in 2028. The amounts have been adjusted to reflect changes due to the CRA audit.

At December 31, 2019, the Company has $237,997 (2018 - $237,997) of unclaimed Ontario Research and Development Tax Credit available to reduce Ontario income taxes payable in future years. If not utilized, this credit will start expiring in 2029. The amounts have been adjusted to reflect changes due to the CRA audit.

(In U.S. Dollars)

9. *COMMITMENTS*

As part of its program of research and development around the single-port robotic surgical system, the Company has outsourced certain aspects of the design and development to third party technology and development companies. At December 31, 2019, $1,327,294 in purchase orders remain outstanding (2018 - $ 12,756,962), however work relating to these commitments is currently delayed pending additional funding and the ramp up in the Company's development projects. The Company also has on deposit with a U.S. supplier $481,400 to be applied against future invoices (2018 - $8,541,630).

10. RELATED PARTY TRANSACTIONS

During the year ended December 31, 2019, transactions between the Company's directors, officers and other related parties were related to compensation matters in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

Compensation paid to Executive Officers for the year ended December 31, 2019 amounted to $1,495,611 compared to $1,552,367 for the year ended December 31, 2018.

	December 31, 2019		December 31, 2018	
	Number of Shares	%	Number of Shares	%
John Barker	32,714	0.08	31,714	0.15
Stephen Randall	22,993	0.06	21,643	0.10
David McNally	4,167	0.01	4,167	0.02
John Schellhorn	294	0.00	294	0.00
Bruce Wolff [1]	—	—	7,610	0.03
Total	**60,168**	**0.15**	**65,428**	**0.30**
Common Shares Outstanding	**39,907,681**	**100%**	**21,675,849**	**100%**

1: Bruce Wolff retired as a Director effective May 29, 2019

11. FINANCIAL INSTRUMENTS

The Company's financial instruments consist of cash and cash equivalents, amounts receivable and accounts payable and accrued liabilities. The fair value of these financial instruments approximates their carrying values, unless otherwise noted, due to the short maturities of these instruments or the discount rate applied. Warrant liabilities are valued at fair value as described in note 2(h).

11. FINANCIAL INSTRUMENTS (continued)

The Company's risk exposures and their impact on the Company's financial instruments are summarized below:

a) Credit risk

The Company's credit risk is primarily attributable to cash and cash equivalents and amounts receivable. The Company has no significant concentration of credit risk arising from operations. Cash and cash equivalents are held with reputable financial institutions, from which management believes the risk of loss to be remote. Financial instruments included in amounts receivable consists of HST tax due from the Federal Government of Canada and interest receivable from interest saving account and short-term promissory notes. Management believes that the credit risk concentration with respect to financial instruments included in amounts receivable is remote.

b) Liquidity risk

The Company's approach to managing liquidity risk is to ensure that it will have sufficient liquidity to meet liabilities when due and when appropriate will scale back its operations. As at December 31, 2019, the Company had cash and cash equivalents of $814,492 (December 31, 2018 -$11,471,243) to settle liabilities of $11,441,668 (December 31, 2018 - $6,447,888) excluding warrant liabilities of $3,621,444 (December 31, 2018 - $11,250,167).

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

The ability of the Company to arrange such financing in the future will depend in part upon prevailing capital market conditions and the business success of the Company. There can be no assurance that the Company will be successful in its efforts to arrange additional financing on terms satisfactory to the Company. If additional financing is raised by the issuance of shares or convertible securities from treasury, control of the Company may change, and shareholders may suffer additional dilution. If adequate funds are not available, or are not available on acceptable terms, the Company may not be able to take advantage of opportunities, or otherwise to resume and continue its technology development program.

c) Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates and foreign exchange rates.

(i) Interest rate risk

The Company has cash balances and no interest-bearing debt. The Company's current policy is to invest excess cash in interest savings accounts and short-term promissory notes. The Company periodically monitors the investments it makes and is satisfied with the credit risk of its bank.

(ii) Foreign currency risk

The Company's functional currency is the U.S. dollar. Expenditures transacted in foreign currency are converted to U.S. dollars at the rate in effect when the transaction is initially booked. The gain or loss on exchange, when the transaction is settled, is booked to the Statement of Net and Comprehensive Loss. Management acknowledges that there is a foreign exchange risk derived from currency conversion and believes this risk to be low as the Company now maintains a minimum balance of Canadian dollars.

d) Sensitivity analysis

Cash equivalents include cash balances and amounts on deposit in interest savings account and short-term promissory notes. Sensitivity to a plus or minus 1% change in interest rates could affect annual net loss by $62,071 (December 31, 2018 - $113,711) based on the current level of cash invested in cash equivalents.

11. FINANCIAL INSTRUMENTS (continued)

A strengthening of the U.S. dollar at December 31, 2019, as indicated below, against current assets and accounts payable and accrued liabilities denominated in Canadian currency of CDN $556,276 (December 31, 2018 - $277,228) and warrant liability of CDN $868,855 (December 31, 2018 - $5,520,457) would result in increased equity and an increased profit for the period of $32,541 (December 31, 2018 - $192,059) as shown on the chart below. This analysis is based on foreign currency exchange rate variances that the Company considers to be reasonably possible at the end of the reporting period. The analysis assumes that all other variables, in particular, interest rates, remain constant. The analysis is performed on the same basis for December 31, 2018.

December 31, 2019	**Profit of (Loss)**
5% strengthening	
CDN Current assets	$ (19,687)
CDN Accounts payable and accrued liabilities	$ 52,228
	$ 32,541

December 31, 2018	
5% strengthening	
CDN Current assets	$ (10,155)
CDN Accounts payable and accrued liabilities	$ 202,214
	$ 192,059

A weakening of the U.S. dollar against the Canadian dollar at December 31, 2019 and December 31, 2018 would have had the equal but opposite effect on the above currencies to the amount shown above, on the basis that all other variables remain constant.

12. *SEGMENTED REPORTING*

The Company operates in a single reportable operating segment – the research and development of the Company's single-port robotic surgical system, the next generation of surgical robotic platform. The Company's long-term assets are domiciled in Toronto, Canada.

13. CAPITAL MANAGEMENT

The Company's capital is composed of shareholders' equity. The Company manages its capital structure and makes adjustments to it, based on the funds available to the Company, to support the development of its single-port robotic surgical system. The Board of Directors does not establish quantitative return on capital criteria for management, but rather relies on the expertise of the Company's management to sustain future development of its single-port robotic surgical system. The Company has further progress to make in the development of the single-port robotic surgical system and anticipates that the cost of completion will exceed its current resources. Accordingly, the Company will be dependent on external financing to fund its future activities. To carry out the completion of the single-port robotic surgical system and pay for administrative costs, the Company will continue to raise additional amounts as needed. Management reviews its capital management approach on an ongoing basis and believes that this approach, given the relative size of the Company, is reasonable. There were no changes in the Company's approach to capital management during the year ended December 31, 2019.

The Company is not subject to externally imposed capital requirements other than the Nasdaq requirement that the Company maintain a minimum market value of $35 million. The Company currently does not meet this requirement and has until May 25, 2020 to regain compliance otherwise the Company's securities are subject to potential de-listing.

(In U.S. Dollars)

14. *SUBSEQUENT EVENTS*

COVID-19

Since December 31, 2019, the outbreak of the novel strain of coronavirus, specifically identified as "COVID-19", has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and social distancing, have caused material disruption to business globally resulting in an economic slowdown. Global equity markets have experienced significant volatility and weakness. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The duration and impact of the COVID-19 outbreak is unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on the financial results and condition of the Company in future periods.

March 2020 Offering

On March 25, 2020, the Company entered into definitive agreements with institutional investors that provide for the purchase and sale of 7,000,000 common shares of the Company (the "Common Shares") at a per share purchase price of $0.17 per Common Share and 3,500,000 Common Share purchase warrants (each, a "Warrant"), resulting in total gross proceeds of approximately $1.2 million (approximately $0.885 million net of closing costs including cash commission described below). Each whole Warrant is exercisable to purchase one Common Share (a "Warrant Share") at an exercise price of $0.19 per Common Share for a period of five years following the date of closing of the offering. The warrants were valued at $618,100 based on the value determined by the Black-Scholes model and the balance of $571,900 was allocated to common shares.

H.C. Wainwright & Co. ("Wainwright") is acting as the exclusive placement agent for the offering. Pursuant to the placement agency agreement, in addition to the cash commission paid to Wainwright of $83,300, broker warrants were issued to Wainwright which entitle the holder to purchase 490,000 Common Shares at a price of US $0.2125 per share prior to expiry on March 25, 2025.

Titan intends to use the net proceeds from the offering for general corporate purposes including: resuming the development of its single-port robotic surgical system, instruments and accessories; funding working capital (including the reduction of outstanding payables); and capital expenditures.

December 2019 Aspire Agreement

On December 23, 2019, the Company entered into a common share purchase agreement with Aspire Capital whereby Aspire Capital committed to purchase up to $35 million of common shares of Titan at Titan's request from time to time, until June 23, 2022. Subsequent to the commencement of the Aspire Agreement and subsequent to December 31, 2019, Titan sold Common Shares to Aspire pursuant to the Aspire Agreement as outlined in the following table:

Grant Date	Common shares issued	Value
January 3, 2020	500,000	$ 219,600
January 6, 2020	500,000	229,300
January 8, 2020	400,000	195,160
January 10, 2020	500,000	247,550
January 17, 2020	600,000	303,000
January 23, 2020	600,000	295,320
February 6, 2020	600,000	282,000
February 13, 2020	708,048	300,000
	4,408,048	$2,071,930

Stock Options

On January 28, 2020, the Company issued 25,765 stock options with an exercise price of CDN $0.657 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years.

January Equity Transaction

On January 3, 2020, the Company announced that Cambridge Design Partnership Ltd. ("Cambridge"), has subscribed for common shares of the Company. The Company issued 501,148 Common Shares at a unit price of $0.50 for satisfaction of the trade payable with Cambridge of $250,574 which has been included in capital.

TITAN MEDICAL INC.
Financial Statements
Years Ended December 31, 2018 and 2017

(IN UNITED STATES DOLLARS)

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Report of Independent Registered Public Accounting Firm

To the Shareholders of Titan Medical Inc.

Opinion on the Financial Statements

We have audited the accompanying financial statements of Titan Medical Inc. (the "Company"), which comprise the balance sheets as of December 31, 2018, and 2017 the related statements of changes in shareholders' equity and deficit, net and comprehensive loss, and cash flow for the years ended December 31, 2018, and 2017 and the related notes including a summary of significant accounting policies and other explanatory information (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018, and 2017 and the results of their operations and their cash flows for the years ended December 31, 2018**,** and 2017 in conformity with International Financial Reporting Standards (IFRSs) as issued by International Accounting Standards Board ("IASB").

Going Concern Uncertainty

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has suffered recurring losses from operations and has a net capital deficiency that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. Further, we are required to be independent of the Company in accordance with the ethical requirements that are relevant to our audits of the financial statements in Canada and to fulfill our other ethical responsibilities in accordance with these requirements.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

(signed) BDO Canada LLP

Chartered Professional Accountants, Licensed Public Accountants
Toronto, Canada

March 30, 2020

We have served as the Company's auditor since 2010.

TITAN MEDICAL INC.
Balance Sheets
As at December 31, 2018 and December 31, 2017
(In U.S. Dollars)

	Note	December 31, 2018	December 31, 2017
Assets			
Current Assets:			
Cash and cash equivalents		$ 11,471,243	$ 26,130,493
Amounts receivable		143,225	75,151
Deposits	8	8,541,630	2,538,434
Prepaid expense		586,581	149,593
Total Current Assets		$ 20,742,679	$ 28,893,671
Furniture and Equipment	3	—	6,714
Patent Rights	4	1,172,485	774,225
Total Assets		$ 21,915,164	$ 29,674,610
Liabilities			
Current Liabilities:			
Accounts payable and accrued liabilities		$ 6,447,888	$ 2,218,352
Warrant liability	2h, 5(a), 6	11,250,167	17,849,460
Total Liabilities		17,698,055	20,067,812
Shareholders' Equity			
Share Capital	5a	170,502,394	154,016,519
Contributed Surplus		6,652,409	5,146,784
Warrants	5b	—	741,917
Deficit		(172,937,694)	(150,298,422)
Total Equity		4,217,109	9,606,798
Total liabilities and equity		$ 21,915,164	$ 29,674,610

Commitments (Note 8)
See notes to financial statements

Approved on behalf of the Board:

"signed"	*"signed"*
John E. Barker	**David McNally**
Chairman	**President and CEO**

TITAN MEDICAL INC.
Statement of Shareholders' Equity and Deficit
For the Years Ended December 31, 2018 and 2017
(In U.S. Dollars)

	Note	Share Capital Number	Share Capital Amount	Contributed Surplus	Warrants	Deficit	Total Equity
Balance - December 31, 2016	5(a)	5,550,382	$112,742,810	$3,707,432	$ 855,800	$(116,711,438)	$ 594,604
Issued pursuant to agency agreement		4,232,428	20,799,951				20,799,951
Issued private placement		1,009,263	4,564,737				4,564,737
Issued other		7,500	67,954				67,954
Share issue expense			(2,132,238)				(2,132,238)
Warrants exercised during the year		1,755,141	17,392,158				17,392,158
Warrants expired during the year			113,883		(113,883)		—
Broker warrants exercised during the year		132,009	467,264				467,264
Stock based compensation				1,439,352			1,439,352
Net and Comprehensive loss for the year						(33,586,984)	(33,586,984)
Balance - December 31, 2017		12,686,723	$154,016,519	$5,146,784	$ 741,917	$(150,298,422)	$ 9,606,798
Issued pursuant to agency agreement		8,975,126	16,915,394				16,915,394
Issued Other		7,500	66,234				66,234
Share issue expense			(1,297,668)				(1,297,668)
Warrants exercised during the year		6,500	59,998				59,998
Warrants expired during the year			741,917		(741,917)		—
Stock based compensation				1,505,625			1,505,625
Net and Comprehensive loss for the year						(22,639,272)	(22,639,272)
Balance - December 31, 2018		21,675,849	$170,502,394	$6,652,409	$ —	$(172,937,694)	$ 4,217,109

See notes to financial statements

TITAN MEDICAL INC.
Statement of Net and Comprehensive Loss
For the Years Ended December 31, 2018 and 2017
(In U.S. Dollars)

	Note	Year Ended December 31, 2018	Year Ended December 31, 2017
Revenue:		**$ —**	**$ —**
Expenses:			
Amortization		29,041	17,360
Consulting fees		785,128	598,804
Stock based compensation	5(b)	1,505,625	1,439,352
Insurance		252,514	25,897
Management salaries and fees		2,683,187	2,449,323
Marketing and investor relations		231,032	277,737
Office and general		412,039	284,532
Professional fees		485,639	452,751
Rent		97,782	97,817
Research and Development		32,858,339	12,900,855
Travel		350,016	339,628
Foreign exchange (gain)/loss		(979,894)	542,664
		38,710,448	19,426,720
Finance Income (cost):			
Interest		288,300	17,442
Gain (Loss) on change in fair value of warrants	2(h), 5(a), 6	17,095,220	(13,133,671)
Warrant liability issue cost		(1,312,344)	(1,044,035)
		16,071,176	(14,160,264)
Net and Comprehensive Loss For The Year		**$ 22,639,272**	**$ 33,586,984**
Basic and Diluted Loss Per Share		**$ (1.36)**	**$ (4.25)**
Weighted Average Number of Common Shares, Basic and Diluted		**16,635,092**	**7,899,443**

See notes to financial statements

TITAN MEDICAL INC.
Statements of Cash Flows
For the Years Ended December 31, 2018 and 2017
(In U.S. Dollars)

	Year Ended December 31, 2018	Year Ended December 31, 2017
Cash provided by (used in):		
Operating activities:		
Net loss for the year	$ (22,639,272)	$ (33,586,984)
Items not involving cash:		
Amortization	29,041	17,360
Stock based compensation	1,505,625	1,439,352
Other share compensation	66,234	120,171
Warrant liability-fair value adjustment	(17,095,220)	12,423,889
Warrant liability-foreign exchange adjustment	(984,462)	305,475
Loss on extinquishment of other liabilities	—	709,782
Changes in non-cash working capital items:		
Amounts receivable, prepaid expenses and deposits	(6,508,259)	(504,056)
Accounts payable and accrued liabilities	4,229,536	(13,849)
Cash used in operating activities	(41,396,777)	(19,088,860)
Financing activities:		
Net proceeds from issuance of common shares and warrants	27,158,114	41,084,278
Cash provided by financing activities	27,158,114	41,084,278
Investing Activities:		
Increase in furniture and equipment	—	(3,427)
Cost of Patents	(420,587)	(201,409)
Cash used in investing activities	(420,587)	(204,836)
Increase (decrease) in cash and cash equivalents	(14,659,250)	21,790,582
Cash and cash equivalents, beginning of year	26,130,493	4,339,911
Cash and cash equivalents, end of year	$ 11,471,243	$ 26,130,493
Cash and cash equivalents comprise:		
Cash	$ 100,130	$ 354,295
Cash Equivalents	11,371,113	25,776,198
	$ 11,471,243	$ 26,130,493

See notes to financial statements

1. *DESCRIPTION OF BUSINESS*

Nature of Operations:

Titan Medical Inc's (the "Company") business continues to be in the research and development stage and is focused on the continued research and development of the next generation surgical robotic platform. In the near term, the Company will continue efforts to complete product development and proceed to pre-clinical and confirmatory human studies and satisfaction of appropriate regulatory requirements. Upon receipt of regulatory approvals, the Company will transition from the research and development stage to the commercialization stage. The completion of these latter stages will be subject to the Company receiving additional funding in the future.

The Company is incorporated in Ontario, Canada in accordance with the Business Corporations Act. The address of the Company's corporate office and its principal place of business is Toronto, Canada.

Basis of Preparation:

(a) Statement of Compliance

These financial statements for the year ended December 31, 2018 and December 31, 2017 have been prepared in accordance with International Accounting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

The financial statements were authorized for issue by the Board of Directors on February 13, 2019.

(b) Basis of Measurement

These financial statements have been prepared on the historical cost basis except for the revaluation of the warrant liability, which is measured at fair value.

(c) Functional and Presentation Currency

These financial statements are presented in United States dollars ("U.S."), which is the Company's functional and presentation currency.

2. *SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES*

(a) Use of Estimates and Judgements

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of provisions at the date of the financial statements and the reported amount of expenses during the year. Financial statement items subject to significant judgement include, the measurement of stock-based compensation and the fair value estimate of the initial measurement of new warrant liabilities and the remeasurement of unlisted warrant liabilities. While management believes that the estimates and assumptions are reasonable, actual results may differ.

These financial statements have been prepared in accordance with accounting principles applicable to going concern, which contemplates that the Company will be able to realize its assets and settle its liabilities in the normal course as they come due during the normal course of operations for the foreseeable future. The Company has shareholders' deficiency of $172,937,694 and current losses of $22,639,272. 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. The Company expects that approximately US $45 million in incremental funding is needed, for the next 12 months to maintain its currently anticipated pace of development. If additional funding is not available, the pace of the Company's product development plan may be reduced. 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. However, based on internal forecasts, Management believes that the Company has sufficient funds to meet its obligations under a reduced development plan, if necessary, for the ensuing twelve months.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Fair Value

The Black-Scholes model used by the Company to determine fair values of stock options and warrants was developed for use in estimating the fair value of the stock options and warrants.

(b) Cash and Cash Equivalents

Cash and cash equivalents include cash balances and amounts on deposit in interest saving account and short-term promissory notes expiring January 30, 2019 with interest rates ranging from 2.18% to 2.32%.

(c) Furniture and Equipment

Furniture and equipment are recorded at cost less accumulated amortization and accumulated impairment losses, if any. The Company records amortization using the straight-line method over the estimated useful lives of the capital assets as follow:

a)	Computer Equipment	3 years
b)	Furniture and Fixtures	3 – 5 years
c)	Leasehold Improvements	Term of the lease

(d) Impairment of Long-Lived Assets

The Company reviews computer equipment, furniture and equipment, leasehold improvements and patent rights for objective evidence of impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable. Recoverability is measured by comparison of the asset's carrying amount to the asset's recoverable amount, which is the greater of fair value less cost to sell and value in use. Value in use is measured as the expected future discounted cash flows expected to be derived from the asset. If the carrying value exceeds the recoverable amount, the asset is written down to the recoverable amount.

(e) Patent Rights

Patent rights are recorded at cost less accumulated amortization and accumulated impairment loss. Straight line amortization is provided over the estimated useful lives of the assets, as prescribed by the granting body, which range up to twenty years.

(f) Deferred Income Taxes

The Company uses the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities, unused tax losses and income tax reductions, and are measured using the substantively enacted tax rates and laws that will be in effect when the differences are expected to reverse. A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. Management has determined not to recognize its net deferred tax assets, as it is not considered probable that future tax benefits will be realized.

2. ***SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES*** (continued)

(g) Foreign Currency

Transactions in currencies other than U.S. dollars are translated at exchange rates in effect at the date of the transactions. Foreign exchange differences arising on settlement are recognized separately in net and comprehensive loss. Monetary year end balances are converted to U.S. dollars at the rate in effect at that time. Non-monetary items in a currency other than U.S. dollars that are measured in terms of historical cost are translated using the exchange rate at the date of transaction or date of adoption of U.S functional currency, whichever is later. Foreign exchange gains and losses are included in net and comprehensive loss.

(h) Warrant Liability

In accordance with IAS 32, because the exercise prices of warrants issued are not a fixed amount as they are denominated in a currency (Canadian dollars) other than the Company's functional currency (U.S. dollar), as well as the warrants issued August 10, 2018 with the cashless exercise options, the warrants are accounted for as a derivative financial liability. Each Warrant Liability is initially measured at fair value and subsequent changes in fair value are recorded through Net and Comprehensive Loss for the year. The fair value of these warrants was determined initially using a comparable warrant quoted in an active market, adjusted for differences in the terms of the warrant. At December 31, 2018, the Warrant Liability of listed warrants was adjusted to fair value measured at the market price of the listed warrants and the unlisted warrants were adjusted to fair value using the Black-Scholes formula.

(i) Fair Value Measurement

The accounting guidance for fair value measurements prioritizes the inputs used in measuring fair value into the following hierarchy:

Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 – Inputs other than quoted prices included within Level 1 that are directly or indirectly observable:

Level 3 – Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

The fair value of the listed and unlisted Warrant liability is initially based on level 2 significant observable inputs and at December 31, 2018 and December 31, 2017 is based on level 1, quoted prices (unadjusted) for listed warrants and level 2 for unlisted warrants.

(j) Stock Based Compensation

IFRS 2 requires options granted to employees and others providing similar services to be measured at the fair value of goods or services received, unless that fair value cannot be estimated reliably. If the entity cannot estimate reliably the fair value of the goods or services received, the entity shall measure the value and the corresponding increase in equity, indirectly, by reference to the fair value of the equity instruments granted, which the Company does using the Black-Scholes option- pricing model. The fair value of the options granted is determined as at the grant date.

Stock options granted to non-employees are valued at the fair value of the goods or service received, measured at the date on which the goods are received, or the services rendered. If the entity cannot estimate reliably the fair value of the goods or services received, the entity shall measure the value and the corresponding increase in equity, indirectly, by reference to the fair value of the equity instruments granted, which the Company does using the Black-Scholes option- pricing model. The fair value of the options granted is determined as at the grant date.

2. ***SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES*** (continued)

(k) Research and Development Costs

Research and development activities undertaken with the prospect of gaining new scientific or technical knowledge and understanding are expensed as incurred. The costs of developing new products are capitalized as deferred development costs, if they meet the development capitalization criteria under IFRS. These criteria include the ability to measure development costs reliably, the product is technically, and commercially feasible, future economic benefits are probable, and the Company intends to and has sufficient resources to complete development and to use or sell the asset. To date, all the research and development costs have been expensed as the criteria for capitalization have not yet been met.

(l) Earnings (loss) per Share

Basic earnings (loss) per share are calculated using the weighted-average number of common shares outstanding during the year. Diluted earnings (loss) per share considers the dilutive impact of the exercise of 925,782 outstanding stock options (December 31, 2017 – 591,609) and 13,901,859 warrants, (December 31, 2017– 5,108,588) as if the events had occurred at the beginning of the period or at a time of issuance, if later. Diluted loss per share has not been presented in the accompanying financial statements, as the effect would be anti-dilutive.

(m) Investment tax credits

As a result of incurring scientific research and development expenditures, management has estimated that there will benon-refundable federal and refundable and non-refundable provincial investment tax credits receivable following the completion of an audit process by tax authorities. Investment tax credits are recorded when received or when there is reasonable assurance that the credits will be realized. Upon recognition, amounts will be recorded as a reduction of research and development expenditures.

(n) Financial Instruments

Financial assets include cash and cash equivalents, and amounts receivable which are measured at amortized cost. Amounts receivable include HST recoverable and other receivables. Financial liabilities include accounts payable and accrued liabilities which are measured at amortized cost.

(o) Short term Employee Benefits

Short-term employee benefit obligations including Company paid medical, dental and life insurance plans, are measured on an undiscounted basis and are expensed as the related service is provided.

(p) Provisions

A provision is recognized, if as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Presently the Company is not aware of the need for any material provisions nor has it recorded any except as otherwise disclosed in the financial statements.

(q) Lease payments

Payments made under operating leases are recognized as an expense on a straight-line basis over the term of the lease. Lease incentives received, if any, are recognized as an integral part of the total lease expense over the term of the lease.

(In U.S. Dollars)

2. ***SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES*** (continued)

(r) Standards, Amendments and Interpretations Not yet Effective

Following is a listing of amendments, revisions and new IFRS standards, which have been issued but not effective until annual periods beginning after December 31, 2018.

IFRS 16 Leases, to supersede the requirements in IAS 17,IFRIC-15 and SIC-17. The new standard is effective for annual periods beginning on or after January 1, 2019.

Management believes the new standard, effective January 1, 2019 will not have a material impact on future results and Financial Position of the Company.

Adoption Of New Accounting Standard

IFRS 9 Financial Instruments

Effective January 1, 2018, the Company adopted IFRS 9 Financial Instruments (IFRS 9) which replaced IAS 39, Financial Instruments: Recognition and Measurement (IAS 39). IFRS 9 includes revised guidance on the classification and measurement of financial assets and liabilities; new guidance for measuring impairment on financial assets; and new hedge accounting guidance.

On adoption of IFRS 9, the Company has classified the financial assets and financial liabilities held at January 1, 2018, based on the new classification requirements and the characteristics of each financial instrument as at the transition date. The new classification did not require a restatement of prior periods.

The following table shows the original classification under IAS 39 and the new classification under IFRS 9 for each of the Company's financial assets and financial liabilities at January 1, 2018, (there is no change to the carrying amounts of the financial instruments from this change).

Financial Instrument	IAS 39 Classification	IFRS 9
Financial Asset		
Cash and cash equivalents	Loans and receivables	Amortized cost
Amounts receivable	Loans and receivables	Amortized cost
Financial Liabilities		
Accounts payable and accrued liabilities	Other financial liabilities	Amortized Cost

3. FURNITURE AND EQUIPMENT

	Computer Equipment	Furniture and Fixtures	Leasehold Improvements	Total
Cost				
Balance at December 31, 2017	$ 83,880	$ 261,483	$ 172,601	$517,964
Additions	—	—	—	—
Balance at December 31, 2018	$ 83,880	$ 261,483	$ 172,601	$517,964
Amortization & Impairment Losses				
Balance at December 31, 2017	$ 77,166	$ 261,483	$ 172,601	$511,250
Amortization for the year	6,714	—	—	6,714
Balance at December 31, 2018	$ 83,880	$ 261,483	$ 172,601	$517,964
Net Book Value				
At December 31, 2017	$ 6,714	$ —	$ —	$ 6,714
At December 31, 2018	$ —	$ —	$ —	$ —

4. PATENT RIGHTS

Cost	
Balance at December 31, 2017	$ 978,126
Additions	420,587
Balance at December 31, 2018	$1,398,713
Amortization & Impairment Losses	
Balance at December 31, 2017	$ 203,901
Amortization for the period	22,327
Balance at December 31, 2018	$ 226,228
Net Book Value	
At December 31, 2017	$ 774,225
At December 31, 2018	$1,172,485

5. *SHARE CAPITAL*

a) **Authorized:** unlimited number of common shares, no par

Issued: 21,675,849 (December 31, 2017: 12,686,723)

Exercise prices of units, warrants and options are presented in Canadian currency as they are exercisable in Canadian dollars unless otherwise noted.

On June 19, 2018 a share consolidation of 1:30 was completed and the Company's outstanding common shares were adjusted from 419,888,250 to 13,996,275. All references to the common shares, warrants and stock options, prior to June 20, 2018, have been updated in the notes to reflect the 1:30 reverse stock split.

5. ***SHARE CAPITAL*** (continued)

On August 10, 2018 Titan Completed an offering of securities made pursuant to an agency agreement dated August 7, 2018 between the Company and Bloom Burton Securities Inc. (the "Agent"). The Company sold 7,679,574 Units under the Offering at a price of US $2.50 per Unit for gross proceeds of approximately $19,198,935 ($17,464,711 net of closing cost including cash commission of $1,343,925). Each Unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of US $3.20 and expiring August 10, 2023. The warrants were valued at $6,297,251 based on the value determined by the Black-Scholes model and the balance of $12,901,684 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to the Agent, broker warrants were issued to the Agent which entitle the holder to purchase 537,570 Common Shares at a price of USD $2.50 per share prior to expiry on August 10, 2020.

On April 10, 2018 Titan completed an offering of securities made pursuant to an agency agreement dated April 3, 2018 between the Company and Bloom Burton Securities Inc. The Company sold 1,126,664 Units under the Offering at a price of CDN $9.00 per Unit for gross proceeds of approximately $8,035,941 ($7,211,320 net of closing costs including cash commission of $562,516). Each Unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of CDN $10.50 and expiring April 10, 2023. The warrants were valued at $4,553,700 based on the value determined by the Black-Scholes model and the balance of $3,482,241 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to the Agent, broker warrants were issued to the Agent which entitle the holder to purchase 78,867 Common Shares at a price of CDN $9.00 per share prior to expiry on April 10, 2020.

On May 10, 2018 Titan announced the completion of the over-allotment option granted to Bloom Burton Securities Inc. as agent for its offering at a price of CDN $9.00 per Unit completed on April 10, 2018 was exercised and the Company sold an additional 168,888 Units at the offering price for additional gross proceeds of $1,189,856 ($1,100,238 net of closing costs including cash commission of $76,988). Each Unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of CDN $10.50 and expiring April 10, 2023. The warrants were valued at $658,387 based on the value determined by the Black-Scholes model and the balance of $531,469 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to the Agent, broker warrants were issued to the Agent which entitle the holder to purchase 10,928 Common Shares at a price of CDN $9.00 per share prior to expiry on April 10, 2020.

During the year ended December 31, 2017, 1,755,141 warrants had been exercised for total proceeds of $9,438,577. The fair value of the exercised warrants had a value of $7,953,581 which was reclassed from warrant liability to common stock.

On December 5, 2017 Titan completed an offering of securities made pursuant to an agency agreement dated November 30, 2017 between the Company and Bloom Burton Securities Inc. The Company sold 1,533,333 Units under the Offering at a price of CDN $15.00 per Unit for gross proceeds of approximately $18,137,800 ($16,555,875 net of closing costs including cash commission of $1,246,185 paid in accordance with the terms of the agency agreement). Each Unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of CDN $18.00 and expiring December 5, 2022. The warrants were valued at $5,223,686 based on the value determined by the Black-Scholes model and the balance of $12,914,114 was allocated to common shares.

5. SHARE CAPITAL (continued)

Pursuant to the agency agreement in addition to the cash commission paid to the Agent, broker warrants were issued to the Agent which entitle the holder to purchase 105,350 Common Shares at a price of CDN $15.00 per share prior to expiry on December 5, 2019.

On October 31, 2017 Titan completed the final closing of a private placement led by a group of U.S. robotic surgeons. 446,197 common shares of Titan were issued at a subscription price of CDN $7.50 per Common Share for gross proceeds of $2,677,326.

On June 29, 2017 Titan completed an offering of securities made pursuant to an agency agreement dated June 26, 2017 between the Company and Bloom Burton Securities Inc. The Company sold 1,612,955 Units under the Offering at a price of CDN $4.50 per Unit for gross proceeds of approximately $5,576,357 ($4,838,002 net of closing costs including cash commission of $382,689 paid in accordance with the terms of the agency agreement). Each Unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of CDN $6.00 and expiring June 29, 2022. The warrants were valued at $2,788,274 based on the value determined by the Black-Scholes model and the balance of $2,788,083 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to the Agent, broker warrants were issued to the Agent which entitle the holder to purchase 109,533 Common Shares at a price of CDN $4.50 per share prior to expiry on June 29, 2019.

On July 21, 2017 Titan completed a second closing of an offering of securities made pursuant to an agency agreement dated June 26, 2017 between the Company and Bloom Burton Securities Inc. The Company sold an additional 370,567 Units under the Offering at a price of CDN $4.50 per Unit for gross proceeds of approximately $1,328,871 ($1,200,788 net of closing costs including cash commission of $93,021 paid in accordance with the terms of the agency agreement). Each Unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of CDN $6.00 and expiring June 29, 2022. The warrants were valued at $575,844 based on the value determined by the Black-Scholes model and the balance of $753,027 was allocated to common shares.

Pursuant to the agency agreement in addition to the cash commission paid to the Agent, broker warrants were issued to the Agent which entitle the holder to purchase 25,940 Common Share at a price of CDN $4.50 per share prior to expiry on June 29, 2019.

On March 16, 2017 Titan completed an offering of securities made pursuant to an agency agreement dated March 10, 2017 between the Company and Bloom Burton Securities Inc. The Company sold 715,573 Units under the Offering at a price of CDN $10.50 per Unit for gross proceeds of approximately $5,642,537 ($5,039,817 net of closing costs including cash commission of $394,316 paid in accordance with the terms of the agency agreement). Each Unit consisted of one Common Share of the Company and (i)one-half of one Common Share purchase warrant, each whole warrant entitling the holder thereof to acquire one Common Share of the Company at an exercise price of CDN $12.00 and expiring March 16, 2019, and (ii)one-half of one Common Share purchase warrant, each whole warrant entitling the holder thereof to acquire on Common Share of the Company at an exercise price of CDN $15.00 and expiring March 16, 2021. The warrants were valued at $1,297,810 based on the value determined by the Black-Scholes model and the balance of $4,344,727 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to the Agent, broker warrants were issued to the Agent which entitle the holder to purchase 50,005 Common Shares at a price of CDN $10.50 per share prior to expiry on March 16, 2019.

(In U.S. Dollars)

5. SHARE CAPITAL (continued)

On November 23, 2015 Titan closed a private placement of 143,009 Common Shares to Longtai Medical Inc. at a subscription price of CDN $36.90 per common share for gross proceeds of $4,000,000. Under the Agreement, Titan granted to Longtai exclusive rights to negotiate an exclusive marketing, sales and distribution agreement for Titan's SPORT Surgical System in the Asia Pacific region. Longtai paid to Titan $2,000,000 as a deposit toward the Distributorship Agreement.

As the parties were not able to reach consensus as to the Distribution Agreement by the agreed upon date, the deposit became due for repayment to Longtai. On August 24, 2017 Titan completed a subscription agreement with Longtai for the equity conversion of Longtai's $2.0 million deposit. Under the terms of the subscription agreement dated July 31, 2017, Titan issued to Longtai 563,067 Units at an assigned issue price of CDN $4.50 per Unit. Each Unit consists of one Common Share and one Common Share purchase warrant, with each warrant exercisable for one Common Share at an exercise price of CDN $6.00 per warrant and will expire August 24, 2022. The warrants were valued at $822,372 based on the value determined by the Black-Scholes model.

The common shares were valued at $1,887,411 based on the market value on August 24, 2017 of CDN $4.20. The warrant and the common share were valued at fair value in accordance with International Financial Reporting Interpretations Committee Interpretation #19-Extinguishing Financial Liabilities ("IFRIC 19"). A loss of $709,782 was incurred on extinguishment which is included in the Gain (Loss) on change in value of warrant liability in the statement of net and comprehensive loss.

b) **Warrants, Stock Options and Compensation Options**

Titan has reserved and set aside up to 10% of the issued and outstanding shares of Titan for granting of options to employees, officers, consultants and advisors. At December 31, 2018, 1,241,803 common shares (December 31, 2017: 677,063) were available for issue in accordance with the Company's stock option plan. The terms of these options are determined by the Board of Directors. A summary of the status of the Company's outstanding stock options as of December 31, 2018 and December 31, 2017 and changes during the periods ended on those dates is presented in the following table:

	Year Ended December 31, 2018		Year Ended December 31, 2017	
	Number of Stock Options	Weighted-average Exercise Price (CDN)	Number of Stock Options	Weighted-average Exercise Price (CDN)
Balance Beginning	591,609	$ 21.30	240,075	$ 33.00
Granted	372,866	$ 11.97	394,830	$ 15.60
Expired/Forfeited	(38,693)	$ 24.90	(43,296)	$ 34.80
Balance Ending	**925,782**	**$ 17.32**	**591,609**	**$ 21.30**

(In U.S. Dollars)

5. SHARE CAPITAL (continued)

The weighted-average remaining contractual life and weighted-average exercise price of options outstanding and of options exercisable as at December 31, 2018 are as follows:

	Options Outstanding			
Exercise Price (CDN)		Number Outstanding	Weighted-average remaining contractual life (years)	Options Exercisable
$	2.09	50,349	3.00	50,349
$	3.28	31,498	6.67	31,498
$	4.50	18,935	4.54	18,935
$	4.80	3,040	1.71	3,040
$	7.49	5,590	6.52	5,590
$	9.00	11,481	6.52	11,481
$	9.60	1,105	1.77	1,105
$	11.70	6,667	1.93	6,667
$	12.00	1,948	1.93	1,948
$	12.90	50,000	5.30	12,500
$	14.40	18,950	5.86	4,737
$	15.00	16,667	5.11	4,167
$	15.00	273,948	6.06	—
$	17.10	277,519	5.05	69,380
$	30.00	105,719	2.65	81,462
$	30.60	6,120	1.98	6,120
$	32.40	18,810	2.08	18,810
$	41.70	658	0.96	658
$	45.30	560	1.61	560
$	51.60	15,371	1.44	15,371
$	58.20	10,847	0.39	10,847
		925,782	**4.82**	**355,225**

The weighted average exercise price of options outstanding is CDN $17.32 and CDN $18.84 for options that are exercisable. Since the December 18, 2018 options issued to consultants have an exercise price of USD $1.55, they have been converted at the December 18, 2018 close rate of 1.3461 or CDN $2.09.

(In U.S. Dollars)

5. ***SHARE CAPITAL*** (continued)

Options are granted to Directors, Officers, Employees and Consultants at various times. Options are to be settled by physical delivery of shares.

Grant date/Person entitled	Number of Options	Vesting Conditions	Contractual life of Options
January 17, 2017, option grants to Employees	277,519	Vest as to ¼ of the total number of Options granted, every year from Option Date	7 years
February 7, 2017 option grants to Employees	16,667	Vest as to 1/4 of the total number of Options granted, every year from Option Date	7 years
April 17, 2017, option grants to Employees	50,000	Vest as to 1/4 of the total number of Options granted, every year from Option Date	7 years
September 7, 2017, options granted to Consultants	6,667	Half vest in 3 months and the remaining half in 6 months	3 years
September 7, 2017, options granted to Directors	12,269	immediately	7 years
September 15,2017, options granted to Consultants	3,040	immediately	3 years
October 6, 2017, options granted to Consultants	1,105	immediately	3 years
November 8, 2017 option grants to Employees	18,950	Vest as to 1/4 of the total number of Options granted, every year from Option Date	7 years
December 4, 2017, options granted to Consultants	1,948	immediately	3 years
December 4, 2017, options granted to Consultants	6,667	Half vest immediately and the remaining half in 12 months	3 years
January 19, 2018 option grants to Employees	273,948	Options will vest the earlier of commercialization or 3 years from grant date	7 years
July 6, 2018, options granted to Directors	17,071	immediately	7 years
August 29, 2018, options granted to Directors	31,498	immediately	7 years
December 18, 2018, options granted to Consultants	50,349	immediately	3 years

Inputs for Measurement of Grant Date Fair Values

The grant date fair value of all share-based payment plans was measured based on the Black-Scholes formula. Expected volatility was estimated by considering historic average share price volatility. The inputs used in the measurement of fair values at grant date of the share-based option plan are as follows:

	2018	2017
Fair Value at grant date (CDN)	$ 5.99	$ 8.70
Share price at grant date (CDN)	$ 10.79	$ 14.75
Exercise price (CDN)	$ 11.97	$ 15.52
Expected Volatility	90.12%	83.20%
Option Life	3 years	3-4 years
Expected dividends	nil	nil
Risk-free interest rate (based on government bonds)	1.90%	1.06%

(In U.S. Dollars)

5. SHARE CAPITAL (continued)

The following is a summary of outstanding warrants included in Shareholder's Equity as at December 31, 2018 and December 31, 2017 and changes during the periods then ended.

	December 31, 2018		December 31, 2017	
	Number of Warrants	Amount	Number of Warrants	Amount
Opening Balance	175,357	$ 741,917	188,381	$ 855,800
Expired during the year				
Exercise Price CDN $1.25				
Expiry March 18, 2018	(175,357)	(741,917)	—	—
Expired during the year				
Exercise Price CDN $1.77				
Expiry March 14, 2017	—	—	(13,024)	(113,883)
Ending Balance	**—**	**$ —**	**175,357**	**$ 741,917**

***6. WARRANT* LIABILTY**

	December 31, 2018		December 31, 2017	
	Number of Warrants	Amount	Number of Warrants	Amount
Opening Balance	4,933,231	$ 17,849,460	2,581,703	$ 2,365,691
Issue of warrants expiring, March 16, 2019	—	—	357,787	572,326
Issue of warrants expiring, March 16, 2021	—	—	357,787	725,484
Issue of warrants expiring, June 29, 2022	—	—	1,983,521	3,364,118
Issue of warrants expiring, August 24, 2022	—	—	563,067	822,372
Issue of warrants expiring, December 5, 2022	—	—	1,533,333	5,223,686
Issue of warrants expiring, April 10, 2023	1,295,554	5,212,087	—	—
Issue of warrants expiring, August 10, 2023	7,679,574	6,297,251		
Warrants exercised during the year	(6,500)	(28,949)	(1,755,141)	(7,953,581)
Warrants expired during the year	—		(688,826)	—
Foreign exhange adjustment during the year		(984,462)	—	305,475
Fair value adjustment during the year		(17,095,220)		12,423,889
Ending Balance	**13,901,859**	**$ 11,250,167**	**4,933,231**	**$17,849,460**

In addition to the warrants listed above, at December 31, 2018, the Company has issued, outstanding and exercisable, 786,183 broker unit warrants expiring between March 16, 2019 and August 10, 2020 (2017 – 272,650 broker unit warrants expiring between February 23, 2018 and December 5, 2019).

(In U.S. Dollars)

7. *INCOME TAXES*

a) Current Income Taxes

A reconciliation of combined federal and provincial corporate income taxes at the Company's effective tax rate of 26.5% (2017 – 26.5%).

	December 31, 2018	December 31, 2017
Net Loss before income taxes	$ (22,639,272)	$ (33,586,984)
Income taxes at statutory rates	$ (5,999,407)	$ (8,900,551)
Tax effect of expenses not deductible for income tax purposes:		
Tax/FX rate changes and other adjustments	—	(27,053)
Permanent differences	(4,374,564)	3,975,072
Unrecognized share issue costs	(354,072)	(554,252)
Total tax recovery	(10,728,043)	(5,506,784)
Tax recovery not recognized	10,728,043	5,506,784
	$ —	$ —

b) Deferred Income Taxes

Deferred income tax assets and liabilities result primarily form differences in recognition of certain timing differences that give rise to the Company's future tax assets (liabilities) and are as follows:

	December 31, 2018	December 31, 2017
Non-Capital Losses	$ 47,679,897	$ 37,012,271
Qualifying Research and Development expenditures	1,493,309	1,493,309
Share issue costs and other	1,622,533	1,562,116
Total tax assets	50,795,739	40,067,696
Tax assets not recognized	(50,795,739)	(40,067,696)
Net deferred tax assets	$ —	$ —

In assessing the realizability of deferred tax assets, management considers whether it is probable that some or all the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. Management, based on IFRS criteria, has determined, at this time, not to recognize its deferred tax assets.

(In U.S. Dollars)

7. ***INCOME TAXES*** (continued)

c) Losses carried forward

The Company has non-capital losses of approximately $179,924,139 available to reduce future income taxes. Thenon-capital losses expire approximately as follows:

2027	$ 786,557
2028	169,954
2029	186,708
2030	2,003,594
2031	12,735,836
2032	7,260,729
2033	8,856,497
2034	15,819,741
2035	43,934,918
2036	28,310,254
2037	19,604,159
2038	40,255,192
	$179,924,139

The Company has accumulated Qualifying Research and Development expenses of $5,635,128 from prior years research and development. These expenditures may be carried forward indefinitely and used to reduce taxable income in future years.

As a result of a Canada Revenue Agency (CRA) audit completed in 2017 and 2016, regarding Titan's 2012 and 2011 SR&ED claim the 2012 loss of $6,517,436 has been adjusted to $7,260,729 and the 2011 loss of $9,423,694 has been adjusted to $12,735,836. The qualifying SR&ED expenditures has also been adjusted from $9,439,430 to $5,635,128. CRA concluded that the claimed work did not satisfy the SR&ED criteria. Titan is appealing this decision by CRA.

d) Investment Tax Credits

At December 31, 2018 the Company has $1,167,560 (2017 – $1,167,560) of unclaimed investment tax credits available to reduce federal income taxes payable in future years. If not utilized, these investment tax credits will start expiring in 2028. The amounts have been adjusted to reflect changes due to the CRA audit.

At December 31, 2018 the Company has $237,997 (2017 – $237,997) of unclaimed Ontario Research and Development Tax Credit available to reduce Ontario income taxes payable in future years. If not utilized, this credit will start expiring in 2029. The amounts have been adjusted to reflect changes due to the CRA audit.

8. ***COMMITMENTS***

Effective November 30, 2018 the Company's Ancaster, Canada lease and sublease which was to expire January 31, 2019 were terminated. This space was leased at CDN $4,673 per month and sublet for CDN $4,099 per month.

The corporate office is located at 170 University Avenue, Toronto, Canada. Effective October 30, 2017 the Company extended its lease term for a period of 22 months, commencing February 1, 2018 at a monthly rent of CDN $9,969. On November 12, 2018 the lease was amended to reduce the square footage leased from 2,750 to 1,495, reducing the monthly rent to CDN $5,419.

(In U.S. Dollars)

8. COMMITMENTS (continued)

As part of its program of research and development around the SPORT Surgical System, the Company has outsourced certain aspects of the design and development to a U.S. based technology and development company. At December 31, 2018 $12,756,962 in purchase orders remain outstanding (2017 – $4,742,928). The Company also has on deposit with this same U.S. supplier $8,541,630 to be applied against future invoices (2017 – $2,172,943).

9. RELATED PARTY TRANSACATIONS

During the year ended December 31, 2018, transactions between the Company directors, officers and other related parties were related to compensation matters in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

Compensation to the Executive Officers amounted to $1,552,367 for the year ended December 31, 2018 compared to $1,587,667 for the year ended December 31, 2017.

Officers and Directors of the Company control approximately 0.30% of the Company

	December 31, 2018		December 31, 2017	
	Number of Shares	%	Number of Shares	%
John Barker	31,714	0.15	23,715	0.19
Martin Bernholtz	—	—	102,383	0.81
David McNally	4,167	0.02	1,667	0.01
Stephen Randall	21,643	0.10	11,910	0.09
John Schellhorn	294	—	294	—
Bruce Wolff	7,610	0.03	2,010	0.02
Total	**65,428**	**0.30**	**141,979**	**1.12**
Common Shares Outstanding	**21,675,849**	**100%**	**12,686,723**	**100%**

10. FINANCIAL INSTRUMENTS

The Company's financial instruments consist of cash and cash equivalents, amounts receivable and accounts payable and accrued liabilities. The fair value of these financial instruments approximates their carrying values, unless otherwise noted, due to the short maturities of these instruments or the discount rate applied. Warrant liabilities are valued at fair value as described in note 2 (h).

The Company's risk exposures and their impact on the Company's financial instruments are summarized below:

a) Credit risk

The Company's credit risk is primarily attributable to cash and cash equivalents and amounts receivable. The Company has no significant concentration of credit risk arising from operations. Cash and cash equivalents are held with reputable financial institutions, from which management believes the risk of loss to be remote. Financial instruments included in amounts receivable consists of HST tax due from the Federal Government of Canada and interest receivable from interest saving account and short-term promissory notes. Management believes that the credit risk concentration with respect to financial instruments included in amounts receivable is remote.

b) Liquidity risk

The Company's approach to managing liquidity risk is to ensure that it will have sufficient liquidity to meet liabilities when due and when appropriate will scale back its operations. As at December 31, 2018, the Company had cash and cash equivalents of $11,471,243 (December 31, 2017 -$26,130,493) to settle current liabilities of $6,447,888 (December 31, 2017 – $2,218,352) excluding warrant liabilities of $11,250,167 (December 31, 2017 – $17,489,460).

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

The ability of the Company to arrange such financing in the future will depend in part upon prevailing capital market conditions and the business success of the Company. There can be no assurance that the Company will be successful in its efforts to arrange additional financing on terms satisfactory to the Company. If additional financing is raised by the issuance of shares or convertible securities from treasury, control of the Company may change, and shareholders may suffer additional dilution. If adequate funds are not available, or are not available on acceptable terms, the Company may not be able to take advantage of opportunities, or otherwise to continue its technology development program at its current pace.

The Company expects that approximately US $45 million, in incremental funding will be required for fiscal 2019 to maintain its currently anticipated pace of product development. If additional funding is not available, the pace of the Company's development plan may be reduced.

c) Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates and foreign exchange rates.

(i) Interest rate risk

The Company has cash balances and no interest-bearing debt. The Company's current policy is to invest excess cash in interest savings accounts and short-term promissory notes. The Company periodically monitors the investments it makes and is satisfied with the credit risk of its bank.

(In U.S. Dollars)

10. **FINANCIAL INSTRUMENTS** (continued)

(ii) Foreign currency risk

The company's functional currency is the U.S. dollar. Expenditures transacted in foreign currency are converted to U.S. dollars at the rate in effect when the transaction is initially booked. The gain or loss on exchange, when the transaction is settled, is booked to the Statement of Net and Comprehensive Loss. Management acknowledges that there is a foreign exchange risk derived from currency conversion and believes this risk to be low as the Company now maintains a minimum balance of Canadian dollars.

d) Sensitivity analysis

Cash equivalents include cash balances and amounts on deposit in interest savings account and short-term promissory notes. Sensitivity to a plus or minus 1% change in interest rates could affect annual net loss by $113,711 (December 31,2017—$257,762) based on the current level of cash invested in cash equivalents.

A strengthening of the U.S. dollar at December 31, 2018, as indicated below, against Canadian current assets and accounts payable and accrued liabilities including warrant liability of CDN $277,228 and $5,520,457 respectively (December 31, 2017—$509,371 and $22,813,047) would result in increased equity and an increased profit for the period of $192,059 (December 31, 2017, increased equity and an increase profit of $888,913) as shown on the chart below. This analysis is based on foreign currency exchange rate variances that the Company considers to be reasonably possible at the end of the reporting period. The analysis assumes that all other variables, in particular, interest rates, remain constant. The analysis is performed on the same basis for December 31, 2017.

December 31, 2018	**Profit of (Loss)**
5% strengthening	
CDN Current assets	$ (10,155)
CDN Accounts payable and accrued liabilities	$ 202,214
	$ 192,059
December 31, 2017	
5% strengthening	
CDN Current assets	$ (20,301)
CDN Accounts payable and accrued liabilities	$ 909,214
	$ 888,913

A weakening of the U.S. dollar against the Canadian dollar at December 31, 2018 and December 31, 2017 would have had the equal but opposite effect on the above currencies to the amount shown above, on the basis that all other variables remain constant.

11. SEGMENTED REPORTING

The Company operates in a single reportable operating segment – the research and development of SPORT, the next generation of surgical robotic platform.

12. CAPITAL MANAGEMENT

The Company's capital is composed of shareholders' equity. The Company manages its capital structure and makes adjustments to it, based on the funds available to the Company, to support the development of its SPORT Surgical Platform (SPORT). The Board of Directors does not establish quantitative return on capital criteria for management, but rather relies on the expertise of the Company's management to sustain future development of the SPORT. The Company has further progress to make in the development of the SPORT and anticipates that the cost of completion will exceed its current resources. Accordingly, the Company will be dependent on external financing to fund a portion of its future activities. To carry out the completion of the SPORT and pay for administrative costs, the Company will spend its existing working capital and raise additional amounts as needed. Management reviews its capital management approach on an ongoing basis and believes that this approach, given the relative size of the Company, is reasonable. There were no changes in the Company's approach to capital management during the year ended December 31, 2018. The Company is not subject to externally imposed capital requirements.

13. EVENTS AFTER THE REPORTING DATE

This note has been updated to report on events from January 1, 2019 to March 30, 2020.

COVID-19

Since December 31, 2019, the outbreak of the novel strain of coronavirus, specifically identified as"COVID-19", has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and social distancing, have caused material disruption to business globally resulting in an economic slowdown. Global equity markets have experienced significant volatility and weakness. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The duration and impact of the COVID-19 outbreak is unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on the financial results and condition of the Company in future periods.

March 2020 Offering

On March 25, 2020, the Company entered into definitive agreements with institutional investors that provide for the purchase and sale of 7,000,000 common shares of the Company (the "Common Shares") at a per share purchase price of US $0.17 per Common Share and 3,500,000 Common Share purchase warrants (each, a "Warrant"), resulting in total gross proceeds of approximately $1.2 million (approximately $0.885 million net of closing costs including cash commission described below). Each whole Warrant is exercisable to purchase one Common Share (a "Warrant Share") at an exercise price of US $0.19 per Common Share for a period of five years following the date of closing of the offering. The warrants were valued at $618,100 based on the value determined by the Black-Scholes model and the balance of $571,900 was allocated to common shares.

H.C. Wainwright & Co.("Wainwright") acted as the exclusive placement agent for the offering. Pursuant to the placement agency agreement, in addition to the cash commission paid to Wainwright of $83,300, broker warrants were issued to Wainwright which entitle the holder to purchase 490,000 Common Shares at a price of US $0.2125 per share prior to expiry on March 25, 2025.

Titan intends to use the net proceeds from the offering for general corporate purposes including: resuming the development of its single-port robotic surgical system, instruments and accessories; funding working capital (including the reduction of outstanding payables); and capital expenditures.

(In U.S. Dollars)

Stock Options

On January 28, 2020, the Company issued 25,765 stock options with an exercise price of CDN $0.657 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years.

Equity Transaction

On January 3, 2020, the Company announced that Cambridge Design Partnership Ltd. ("Cambridge"), has subscribed for common shares of the Company. The Company issued 501,148 Common Shares at a unit price of $0.50 for satisfaction of the trade payable with Cambridge of $250,574 which has been included in capital.

Aspire Transaction

On December 23, 2019, the Company entered into a common share purchase agreement (the "Aspire Agreement") with Aspire Capital Fund, LLC ("Aspire Capital") whereby Aspire Capital committed to purchase up to $35 million of common shares of Titan ("Common Shares") at Titan's request from time to time, until June 23, 2022 (the "Aspire Transaction"). On commencement of the Aspire Agreement, Titan issued to Aspire Capital 973,000 Common Shares, then issued and outstanding as consideration for entering into the Aspire Agreement. The value of the Common Shares issued of $423,440, was been included in capital, offset by a fee valued at the same amount plus $35,122 other costs incurred pursuant to the Aspire Transaction. In the first quarter of 2020, Titan sold Common Shares to Aspire pursuant to the Aspire Agreement as outlined in the following table:

Grant Date	Common shares issued	Value
January 3, 2020	500,000	$ 219,600
January 6, 2020	500,000	229,300
January 8, 2020	400,000	195,160
January 10, 2020	500,000	247,550
January 17, 2020	600,000	303,000
January 23, 2020	600,000	295,320
February 6, 2020	600,000	282,000
February 13, 2020	708,048	300,000
	4,408,048	**$2,071,930**

First Aspire Transaction

On August 29, 2019, the Company entered into a common share purchase agreement (the "First Aspire Agreement") with Aspire Capital whereby Aspire Capital committed to purchase up to $35 million of common shares of Titan at Titan's request from time to time, until February 28, 2022. 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 $3.0 million and issued to Aspire Capital 639,837 Common Shares, representing 1.9% of the Common Shares then issued and outstanding as consideration for entering into the First Aspire Agreement. Northland Securities, Inc. acted as the Company's agent and financial advisor in connection with the offering and pursuant to an agency agreement, was paid a cash fee of $160,000. The gross proceeds of $3.0 million, net of costs and fees of $417,113 has been included in capital. Subsequent to August 29, 2019 and subject to the First Aspire Agreement, the Company issued Common Shares to Aspire as outlined in the following table:

(In U.S. Dollars)

Grant Date	Common shares issued	Value
August 30, 2019	2,417,162	$3,000,000
November 8, 2019	100,000	42,560
November 8, 2019	100,000	42,560
November 12, 2019	100,000	42,970
November 12, 2019	100,000	42,000
November 13, 2019	100,000	42,970
November 14, 2019	300,000	128,910
November 15, 2019	2,500,000	1,074,250
November 19, 2019	2,067,282	888,311
	7,784,444	**$5,304,531**

March 2019 Offering

On March 21, 2019, Titan completed an offering of securities made pursuant to an agency agreement dated March 18, 2019 between the Company and Bloom Burton Securities Inc. (the "Agent"). The Company sold 8,455,882 Units under the Offering at a price of US $3.40 per Unit for gross proceeds of approximately $28,750,000 ($25,426,744 net of closing cost including cash commission of $2,012,500). Each Unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of US $4.00 and expiring March 21, 2024. The warrants were valued at $15,897,059 based on the value determined by the Black-Scholes model and the balance of $12,852,941 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to the Agent, broker warrants were issued to the Agent which entitle the holder to purchase 591,911 Common Shares at a price of US $3.40 per share prior to expiry on March 21, 2021. The broker warrants were valued using the Black-Scholes model and the value of $864,190 was accounted for as an increase in the closing costs and allocated between the shares and the warrants.

During the quarter ended March 31, 2019, 1,018,506 warrants were exercised for total proceeds of $3,259,219. The fair value of the exercised warrants was $3,742,824 which was reclassed from warrant liability to common stock. No additional warrants were exercised during 2019.

Stock Options and Compensation Options

On May 29, 2019, the shareholders of Titan approved an increase of its reserve for options from 10% and set aside up to 15% of the issued and outstanding shares of Titan for granting of options to employees, officers, consultants and advisors. At December 31, 2019, 5,986,152 common shares (December 31, 2018: 1,241,803) were available for issue in accordance with the Company's stock option plan. The terms of these options are determined by the Board of Directors.

On May 29, 2019, the shareholders approved amendments to the exercise prices of options previously granted to Executive Officers and Other Employees of the Company under the Option Plan. The Exercise price was amended to be US $3.40 (CDN $4.54) per option, being the higher of the March 21, 2019 offering price of US $3.40 per share and the five-day volume weighted average price as determined as of the close of business on May 28, 2019.

(In U.S. Dollars)

Options are granted to Directors, Officers, Employees and Consultants at various times. Options are to be settled by physical delivery of shares. Options and the terms of each issue for the period from January 1, 2019 to date are outlined below.

Grant date/ Recipient	Number of Options	Vesting Conditions	Contractual Life of Options
February 14, 2019, options granted to a Consultant	40,000	Options may vest over a 15-month vesting schedule	Cancelled
May 29, 2019, options granted to a Director	253,000	Options vest over a specified vesting period not exceeding 4 years	7 years
June 28, 2019, options granted to an Employee	10,000	Options vest as to 1/3 of the total number of Options granted, every year from Grant Date	7 years
July 18, 2019, options granted to a Director	25,719	Options vest immediately	7 years
July 19, 2019, options granted to an Employee	467,255	Options vest as to 1/4 of the total number of Options granted, every year from Grant Date	7 years
July 19, 2019, options granted to a Consultant	2,165	Options vest as to 1/3 of the total number of Options granted, every year from Grant Date	7 years
July 19, 2019, options granted to a Director	41,273	Options vest immediately	7 years
September 9, 2019, options granted to a Consultant	40,000	Options vest over a 15-month vesting schedule subject to achieving certain milestones.	2.5 years

Item 19. Exhibits

Exhibit Number	Name
1.1	Articles of Amalgamation dated July 28, 2008 (incorporated by reference from Exhibit 3.1 to the Company's Form F-3 filed on July 30, 2019)
1.2	Articles of Amendment dated June 19, 2018 (incorporated by reference from Exhibit 3.2 to the Company's Form F-3 filed on July 30, 2019)
1.3	Amended and Restated By-Law No. 1 dated June 9, 2015 (incorporated by reference from Exhibit 3.3 to the Company's Form F-3 filed on July 30, 2019)
2.1	Description of the Company's Securities Registered Under Section 12 of the Securities Exchange Act of 1934
4.1	Stock Option Plan
4.2	Share Unit Plan
4.3	Deferred Share Unit Plan
12.1	Certification of the Principal Executive Officer pursuant to Rule 13a-14(a)
12.2	Certification of the Principal Financial Officer pursuant to Rule 13a-14(a)
13.1	Certificate of Principal Executive Officer pursuant to 18 U.S.C. Section 1350
13.2	Certificate of Principal Financial Officer pursuant to 18 U.S.C. Section 1350
15.1	Management's discussion and analysis of the Company for the year ended December 31, 2019
15.2	Management's discussion and analysis of the Company for the year ended December 31, 2018, including subsequent events from January 1, 2019 to March 30, 2020.
15.3	Consent of BDO Canada LLP, Chartered Professional Accountants and Licensed Public Accountants
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

SIGNATURES

The Registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and has duly caused and authorized the undersigned to sight this Annual Report on its behalf.

Titan Medical Inc.

By: */s/ Stephen D. Randall*
Name: Stephen D. Randall
Title: Chief Financial Officer and Director

Date: April 2, 2020

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

As of the date of the Annual Report on Form 20-F of which this Exhibit 2.1 is a part, Titan Medical Inc. (the "**Company**", "**we**", "**us**" or "**our**") has only one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: the Company's common shares (the "**Common Shares**").

Description of Common Shares

*The following description of our Common Shares is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our articles (the "**Articles**"), as amended, which are incorporated by reference as an exhibit to the Annual Report on Form20-F of which this Exhibit 2.1 is a part.*

We have 39,907,681 Common Shares outstanding as of December 31, 2019, and we are authorized to issue an unlimited number of Common Shares, without par value.

Basic Rights of our Common Shares

The holders of Common Shares are entitled to receive notice of and to attend all annual and special meetings of the Company's shareholders and to one vote in respect of each Common Share held at the record date for each such meeting. The holders of Common Shares are entitled, at the discretion of our 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 our 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.

There are no provisions in our Articles discriminating against any existing or prospective shareholder as a result of such shareholder owning a substantial number of our Common Shares, and non-resident or foreign holders of our Common Shares are not limited in having, holding or exercising the voting rights associated with Common Shares. Also, no provision or rights exist in our Articles regarding our Common Shares in connection with exchange, redemption, retraction, purchase for cancellation, surrender or sinking or purchase funds.

Pre-emptive Rights

Our Common Shares do not contain any pre-emptive purchase rights to any of our securities.

Transferability of Common Shares

Our articles do not impose restrictions on the transfer of Common Shares by a shareholder.

Action(s) to change Rights attaching to our Common Shares

The rights, privileges, restrictions and conditions attaching to our shares are contained in our articles and such rights, privileges, restrictions and conditions may be changed by amending our articles. In order to amend our articles, the *Business Corporations Act* (Ontario) (the "**OBCA**") requires a resolution to be passed by a majority of not less than two-thirds of the votes cast by the shareholders entitled to vote thereon. In addition, if we resolve to make particular types of amendments to our articles, a holder of our shares may dissent with regard to such resolution and, if such shareholder so elects, we would have to pay such shareholder the fair value of the shares held by the shareholder in respect of which the shareholder dissents as of the close of business on the day before the resolution was adopted. The types of amendments that would be subject to dissent rights include without limitation: (i) to add, remove or change restrictions on the issue, transfer or ownership of shares of a class or series of our shares; (ii) to add, remove or change any restriction upon the business that we may carry on or upon the powers that we may exercise; (iii) to amalgamate with another corporation in accordance with the OBCA; (iv) to continue under the laws of another jurisdiction in accordance with the OBCA; and (v) to sell, lease or exchange all or substantially all of our property other than in the ordinary course of our business in accordance with the OBCA.

Change of Control restrictions for our Common Shares

There are no provisions in our articles or by-laws that would have the effect of preventing a change in control of the Company.

Ownership disclosure threshold for our Common Shares

Neither our by-laws nor our articles contain any provisions governing the ownership threshold above which shareholder ownership must be disclosed. In addition, securities legislation in Canada requires that we disclose in our proxy information circular for our annual meeting and certain other disclosure documents filed by us under such legislation, holders who beneficially own more than 10% of our issued and outstanding shares.

Exhibit 4.1

TITAN MEDICAL INC.

STOCK OPTION PLAN

(Amended and Restated effective as of May 29, 2019)

1. The Plan and Definitions

A stock option plan (this "**Plan**"), pursuant to which options to purchase common shares in the capital of Titan Medical Inc. (the "**Corporation**") may be granted to the directors, officers and employees of the Corporation and to Service Providers retained by the Corporation, is hereby established on the terms and conditions set forth herein.

The trading price of the Common Shares may vary from time to time and the advantage conferred by the granting of an Option may not be guaranteed. Accordingly, each person who has been granted an Option must decide, in accordance with his own estimate and financial situation, if it is appropriate to exercise any Option granted under this Plan. The decision to exercise or to not exercise an Option shall not affect in any way the status of the option holder within the Corporation or its subsidiaries.

The following capitalized terms used herein shall have the meanings ascribed thereto as follows:

(i) "**Black Out Period**" means the period during which the Corporation has imposed trading restrictions on its insiders and certain other persons pursuant to its insider trading and disclosure policies;

(ii) "**Board**" means the Board of Directors of the Corporation;

(iii) "**control**" and "**controlled**" shall have the meanings ascribed thereto in the *Securities Act* (Ontario);

(iv) "**Common Shares**" means the common shares in the capital of the Corporation;

(v) "**Compensation Plans**" means this Plan, the DSU Plan and the SU Plan;

(vi) "**Disability**" means any disability with respect to a Participant which the Board, in its sole and unfettered discretion, considers likely to prevent permanently the Participant from:

(a) being employed or engaged by the Corporation, its subsidiaries or another employer, in a position the same as or similar to that in which he was last employed or engaged by the Corporation or its subsidiaries; or

(b) acting as a director or officer of the Corporation or its subsidiaries;

(vii) "**DSU Plan**" means the Deferred Share Unit Plan of the Corporation effective as of May 29, 2019;

(viii) "**Eligible Assignee**" means, in respect of a Participant, that person's spouse, minor children or minor grandchildren, Eligible Retirement Plan, Eligible Corporation or Eligible Family Trust;

(ix) "**Eligible Corporation**" means, in respect of a Participant, a corporation controlled by that person and all the shares of which are held by that person and/or Eligible Assignees of that person;

(x) "**Eligible Family Trust**" means, in respect of a Participant, a trust of which the Eligible Person is a trustee and of which all beneficiaries are that person and/or Eligible Assignees;

(xi) "**Eligible Retirement Plan**" means, in respect of a Participant in Canada, a registered retirement savings plan or registered retirement income fund established by that person or under which the beneficiary or annuitant is that person, and in respect of a Participant in the United States, a 401(k) plan or individual retirement account established by that person or under which the beneficiary or annuitant is that person;

(xii) "**Exchange**" means the Toronto Stock Exchange and/or such other stock exchange upon which the Common Shares may become listed;

(xiii) "**Insider**" means a "reporting insider" (as such term is defined in National Instrument 55-104 –*Insider Reporting Requirements and Exemptions*) and "associates" and "affiliates" thereof (as such terms are defined in the rules of the Exchange or where they are not so defined, as such terms are defined in the *Securities Act* (Ontario));

(xiv) "**Insider Participation Limit**" means the number of Common Shares:

(a) issued to Insiders, within any one year period, and

(b) issuable to Insiders, at any time,

under this Plan, and when combined with the SU Plan, DSU Plan and all of the Corporation's other security based compensation arrangements (if any), do not exceed 15% of the Corporation's total issued and outstanding common shares.

(xv) "**Option Period**" shall mean the period during which an Option may be exercised;

(xvi) "**Options**" shall mean options to purchase Common Shares granted under this Plan;

(xvii) "**Participant**" shall have the meaning ascribed to in Section 6(a);

(xviii) "**Service Providers**" shall mean persons or companies engaged by the Corporation to provide services on a continuous basis for an initial, renewable or extended period of twelve months or more and, in the United States, shall only include those persons who may participate in an "Employee Benefit Plan" as set forth in Rule 405 of the U.S. Securities Act;

(xix) "**SU Plan**" mans the Share Unit Plan of the Corporation effective as of May 29, 2019;

(xx) "**U.S. Securities Act**" means the United States Securities Act of 1933, as amended; and

(xxi) "**VWAP**" means the volume weighted average trading price of the Common Shares on the Exchange, calculated by dividing the total value by the total volume of Common Shares traded for the relevant period.

2. Purpose

The purpose of this Plan is to advance the interests of the Corporation by encouraging the directors, officers and employees of the Corporation and Service Providers retained by the Corporation to acquire Shares, thereby: (i) increasing the proprietary interests of such persons in the Corporation; (ii) aligning the interests of such persons with the interests of the Corporation's shareholders generally; (iii) encouraging such persons to remain associated with the Corporation and (iv) furnishing such

persons with an additional incentive in their efforts on behalf of the Corporation.

3. Administration

(a) This Plan shall be administered by the Board.

(b) Subject to the terms and conditions set forth herein, the Board is authorized to provide for the granting, exercise and method of exercise of Options, all on such terms (which may vary between Options granted from time to time) as it shall determine. In addition, the Board shall have the authority to: (i) construe and interpret this Plan and all option agreements entered into hereunder; (ii) prescribe, amend and rescind rules and regulations relating to this Plan and (iii) make all other determinations necessary or advisable for the administration of this Plan. All determinations and interpretations made by the Board shall be binding on all Participants (as hereinafter defined) and on their legal, personal representatives and beneficiaries and permitted assignees hereunder.

(c) The Board's authority to make amendments to this Plan without shareholder approval shall be in accordance with paragraph 18 below.

(d) Notwithstanding the foregoing or any other provision contained herein, the Board shall have the right to delegate the administration and operation of this Plan, in whole or in part, to a committee of the Board or to the Chief Executive Officer or any other officer of the Corporation. Whenever used herein, the term "Board" shall be deemed to include any committee or officer to which the Board has, fully or partially, delegated responsibility and/or authority relating to the Plan or the administration and operation of this Plan pursuant to this Section 3.

(e) Options shall be evidenced by (i) an agreement, signed on behalf of the Corporation and by the person to whom an Option is granted, which agreement shall be in such form as the Board shall approve, or (ii) a written notice or other instrument, signed by the Corporation, setting forth the material attributes of the Options.

(f) The Board shall not grant Options to residents of the United States unless such Options are registered under the U.S. Securities Act or are issued in compliance with an available exemption from the registration requirements of the U.S. Securities Act.

4. Shares Subject to Plan

(a) Subject to Section 15 below, the securities that may be acquired by Participants upon the exercise of Options shall be deemed to be fully authorized and issued Common Shares. Whenever used herein, the term "Common Shares" shall be deemed to include any other securities that may be acquired by a Participant upon the exercise of an Option the terms of which have been modified in accordance with Section 15 below.

(b) The aggregate number of Common Shares reserved for issuance under this Plan and all of the other Compensation Plans of the Corporation, shall not, at the time of the stock option grant, exceed fifteen percent (15%) of the total number of issued and outstanding Common Shares (calculated on a non-diluted basis) unless the Corporation receives the permission of the stock exchange or exchanges on which the Shares are then listed to exceed such limit.

(c) If any Option granted under this Plan shall expire or terminate for any reason without having been exercised in full, any un-purchased Common Shares to which such Option relates shall be available for the purposes of the granting of Options under this Plan.

5. Maintenance of Sufficient Capital

The Corporation shall at all times during the term of this Plan ensure that the number of Common Shares it is authorized to issue shall be sufficient to satisfy the Corporation's obligations under all outstanding Options granted pursuant to this Plan.

6. Eligibility and Participation

(a) The Board may, in its discretion, select any of the following persons to participate in this Plan and to receive Options under this Plan:

(i) directors of the Corporation;

(ii) officers of the Corporation;

(iii) employees of the Corporation; and

(iv) Service Providers;

(any such person having been selected for participation in this Plan by the Board is herein referred to as a "**Participant**").

(b) The Board may from time to time, in its discretion, grant an Option to any Participant, upon such terms, conditions and limitations as the Board may determine, including the terms, conditions and limitations set forth herein, provided that Options granted to any Participant shall be approved by the shareholders of the Corporation if the rules of any stock exchange on which the Shares are listed require such approval.

7. Exercise Price

The Board shall, at the time an Option is granted under this Plan, fix the exercise price at which Common Shares may be acquired upon the exercise of such Option provided that such exercise price may not be lower than the VWAP of the Common Shares on the Exchange over the period of five days immediately preceding the date of the grant. In addition, the exercise price of an Option must be paid in cash. Disinterested shareholder approval shall be obtained by the Corporation prior to any reduction to the exercise price if the affected Participant is an Insider.

8. Number of Optioned Shares

The number of Common Shares that may be acquired under an Option granted to a Participant shall be determined by the Board as at the time the Option is granted, provided that the aggregate number of Shares reserved for issuance to any one Participant under this Plan or any other plan of the Corporation, shall not exceed five percent (5%) of the total number of issued and outstanding Common Shares (calculated on a non-diluted basis) in any 12-month period.

This Plan limits the number of Options which may be granted to Insiders to the Insider Participation Limit except in circumstances where the Corporation has obtained disinterested shareholder approval for grants of Options to Participants who are Insiders where any such grant or grants would result in the Insider Participation Limit being exceeded.

9. Term

The Option Period shall be determined by the Board at the time that the Option is granted, subject to

any vesting limitations which may be imposed by the Board in its sole and unfettered discretion at the time that such Option is granted and Sections 11, 12 and 16 below, provided that:

(a) no Option shall be exercisable for a period exceeding ten (10) years from the date that the Option is granted unless the Corporation receives the required approval of the stock exchange or exchanges on which the Common Shares are then listed and as specifically provided by the Board and as permitted under the rules of any stock exchange or exchanges on which the Shares are then listed;

(b) no Option in respect of which shareholder approval is required under the rules of any stock exchange or exchanges on which the Common Shares are then listed shall be exercisable until such time as the Option has been approved by the shareholders of the Corporation;

(c) the Board may, subject to the receipt of any necessary regulatory approvals, in its sole discretion, accelerate the time at which any Option may be exercised, in whole or in part; and

(d) notwithstanding the expiration date applicable to any Option, if an Option would otherwise expire during a Black Out Period or during the period of ten business days immediately following the last day of a Black Out Period, the expiration date of such Option shall be the tenth business day following the expiration of the Black Out Period, provided that in no event shall the period during which said Option is exercisable be extended beyond 10 years from the date such Option is granted to the Participant.

10. Method of Exercise of Option

(a) Except as set forth in Sections 11 and 12 below or as otherwise determined by the Board, no Option may be exercised unless the holder of such Option is, at the time the Option is exercised, a director, officer, employee or Service Provider of the Corporation or an Eligible Assignee.

(b) Options that are otherwise exercisable in accordance with the terms thereof may be exercised in whole or in part from time to time.

(c) Any Participant (or his legal, personal representative) or Eligible Assignee wishing to exercise an Option shall deliver to the Corporation, at its principal office in the City of Toronto, Ontario:

(i) a written notice expressing the intention of such Participant (or his legal, personal representative) or Eligible Assignee to exercise the Option and specifying the number of Common Shares in respect of which the Option is exercised; and

(ii) a cash payment, certified cheque or bank draft, representing the full purchase price of the Common Shares in respect of which the Option is exercised.

(d) Upon the exercise of an Option as aforesaid, the Corporation shall use reasonable efforts to forthwith deliver, or cause the registrar and transfer agent of the Common Shares to deliver, to the relevant Participant (or his legal, personal representative) or to the order thereof, a certificate representing the aggregate number of fully paid and non-assessable Common Shares in respect of which the Option has been duly exercised.

(e) No Option holder who is resident in the United States may exercise Options unless the Common Shares to be issued upon exercise are registered under the U.S. Securities Act or are issued in compliance with an available exemption from the registration requirements of the U.S. Securities Act.

(f) The Corporation shall be entitled to take all steps necessary to ensure that sufficient funds are provided to the Corporation by the Participant or Eligible Assignee to enable the Corporation to satisfy all withholding tax and other source deduction requirements in respect of the exercise of an Option by the Participant or Eligible Assignee that are imposed by any applicable law, including:

(i) deducting and withholding any amount from any payments made to the Participant or Eligible Assignee, whether hereunder or otherwise;

(ii) requiring from the Participant or Eligible Assignee a cash payment, certified cheque or bank draft in the amount specified by the Corporation; and

(iii) requiring that the Participant or Eligible Assignee enter into a same-day sale in respect of some or all of the Common Shares received on the exercise of an Option, with a portion of the sale proceeds being remitted directly to the Corporation.

11. Ceasing to be a Director, Officer, Employee or Service Provider

Unless the Board otherwise determines:

(a) if a Participant is dismissed for cause as a director, officer or employee of, or Service Provider to, the Corporation or one of its subsidiaries, all unexercised Option rights of that Participant or such Participant's Eligible Assignee (where the Participant has assigned the Option to such Eligible Assignee) under this Plan shall immediately become terminated and shall lapse notwithstanding the original term of the Option granted to such Participant under this Plan; and

(b) if any Participant shall cease to hold the position or positions of director, officer, employee or Service Provider of the Corporation (as the case may be) as a result of (i) retirement at the normal retirement age prescribed by the Corporation, if any; (ii) resignation; or (iii) termination other than for cause; such Participant or such Participant's Eligible Assignee (where the Participant has assigned the Option to such Eligible Assignee) shall have the right for a period to be determined by the Board not exceeding 90 days, or such longer period determined by the Board at its discretion in respect of a specific Option on a date after such Option is granted notwithstanding an earlier determination by the Board, from the date of the Participant ceasing to be a director, officer, employee or Service Provider to exercise his Options under this Plan with respect to all Common Shares issuable thereunder to the extent that the Options were exercisable on the date of such Participant ceasing to hold any such position with the Corporation, or until the normal expiry date of the Option, whichever is earlier. Upon the expiration of such period, all unexercised Option rights of that Participant and any Eligible Assignee thereof under this Plan shall immediately become terminated and shall lapse notwithstanding the original term of the Option granted to such Participant under this Plan.

For greater certainty, the termination of any Options held by the Participant or his Eligible Assignee, and the period during which the Participant or his Eligible Assignee may exercise any Options, shall be without regard to any notice period arising from the Participant's ceasing to hold the position or positions of director, officer, employee or Service Provider of the Corporation (as the case may be).

Neither the selection of any person as a Participant nor the granting of an Option to any Participant under this Plan shall: (i) confer upon such Participant any right to continue as a director, officer, employee or Service Provider of the Corporation, as the case may be; or (ii) be construed as a

guarantee that the Participant will continue as a director, officer, employee or Service Provider of the Corporation, as the case may be.

12. Death or Disability of a Participant

In the event of the death of a Participant, any Option previously granted to him shall be exercisable until the end of the Option Period or until the expiration of 12 months after the date of death of such Participant, whichever is earlier, and then only:

(a) by the person or persons to whom the Participant's rights under the Option shall pass by the Participant's will or applicable law; and

(b) to the extent that he was entitled to exercise the Option as at the date of his death.

Notwithstanding Section 11, in the event of the Disability of a Participant, any Option previously granted to him shall be exercisable until the end of the Option Period or until the expiration of 12 months after the determination by the Board of the Disability, whichever is earlier.

13. Rights of Participants

No person entitled to exercise any Option granted under this Plan shall have any of the rights or privileges of a shareholder of the Corporation in respect of any Common Shares issuable upon exercise of such Option until such Common Shares have been paid for in full and issued to such person.

14. Proceeds from Exercise of Options

The proceeds from any issuance of Common Shares upon the exercise of Options shall be added to the general funds of the Corporation and shall thereafter be used from time to time for such corporate purposes as the Board may determine and direct.

15. Adjustments

(a) The number of Common Shares subject to the Plan shall be increased or decreased proportionately in the event of the subdivision or consolidation of the outstanding Common Shares of the Corporation, and in any such event a corresponding adjustment shall be made to the number of Common Shares deliverable upon the exercise of any Option granted prior to such event without any change in the total price applicable to the unexercised portion of the Option, but with a corresponding adjustment in the price for each Common Share that may be acquired upon the exercise of the Option. In case the Corporation is reorganized or merged or consolidated or amalgamated with another corporation, appropriate provisions shall be made for the continuance of the Options outstanding under this Plan and to prevent any dilution or enlargement of the same.

(b) Adjustments under this Section 15 shall be made by the Board, whose determination as to what adjustments shall be made, and the extent thereof, shall be final, binding and conclusive. No fractional Common Shares shall be issued upon the exercise of an Option following the making of any such adjustment.

16. Change of Control

Notwithstanding any vesting restrictions otherwise applicable to the relevant Options, in the event of a sale by the Corporation of all or substantially all of its assets or in the event of a change of control of

the Corporation, each Participant or his Eligible Assignee shall be entitled to exercise, in whole or in part, the Options granted to such Participant hereunder, either during the term of the Option or within 90 days after the date of the sale or change of control, whichever first occurs.

For the purpose of this Plan, "change of control of the Corporation" means and shall be deemed to have occurred upon:

(a) the acceptance by the holders of Common Shares of the Corporation, representing in the aggregate, more than 50 percent (50%) of all issued Common Shares of the Corporation, of any offer, whether by way of a takeover bid or otherwise, for all or any of the outstanding Common Shares of the Corporation; or

(b) the acquisition, by whatever means, by a person (or two or more persons who, in such acquisition, have acted jointly or in concert or intend to exercise jointly or in concert any voting rights attaching to the Common Shares acquired), directly or indirectly, of beneficial ownership of such number of Common Shares or rights to Common Shares of the Corporation, which together with such person's then owned Common Shares and rights to Common Shares, if any, represent (assuming the full exercise of such rights to voting securities) more than fifty percent (50%) of the combined voting rights of the Corporation's then outstanding Common Shares; or

(c) the entering into of any agreement by the Corporation to merge, consolidate, amalgamate,initiate an arrangement or be absorbed by or into another corporation; or

(d) the passing of a resolution by the Board or shareholders of the Corporation to substantially liquidate the assets or wind-up the Corporation's business or significantly rearrange its affairs in one or more transactions or series of transactions or the commencement of proceedings for such a liquidation, winding-up or re-arrangement (except where such re-arrangement is part of a bona fide reorganization of the Corporation in circumstances where the business of the Corporation is continued and where the shareholdings remain substantially the same following the re-arrangement); or

(e) individuals who were members of the Board immediately prior to a meeting of the shareholders of the Corporation involving a contest for or an item of business relating to the election of directors, not constituting a majority of the Board following such election.

17. Transferability

(a) Subject to sub-section 17(b), all Options and all benefits, interests and rights accruing to any Participant (or such Participant's Eligible Assignee) in accordance with the terms and conditions of this Plan may only be exercised by the Participant (or such Participant's Eligible Assignee) during the lifetime of a Participant and shall be non-transferrable and non-assignable and may not be made subject to execution, attachment or similar process, save and except with the prior written permission of the Board, or in the event of the death of a Participant, by the person or persons to whom the Participant's rights under the Option pass by the Participant's will or applicable laws of descent and distribution.

(b) Notwithstanding section 17(a) but subject to obtaining any necessary approvals in advance from the Corporation and from each Exchange on which the Common Shares are listed and which reserves the right to approve such assignments, a Participant may assign Options granted to him under the Plan to Eligible Assignees and Eligible Assignees may, in turn, assign such Options to the original Participant or to other Eligible Assignees of the original Participant. Notwithstanding any such assignment, (i) all Options granted under the Plan

shall be deemed to be the Option of the original Participant for the purposes of applying the rules and policies of the Exchange on which the Common Shares are listed and (ii) the Corporation shall continue to treat the original Participant as the holder of the assigned Options unless and until such time as the Corporation is provided with notice in writing from the original Participant or its legal representative and the Eligible Assignee, together with such other documentation as the Corporation may require, confirming that the assignee is an Eligible Assignee.

18. Amendment and Termination of Plan

The Board may also, at any time, amend or revise the terms of this Plan, subject to the receipt of all necessary shareholder, Exchange and regulatory approvals, and any such amendment or revision shall apply to any Options theretofore granted under this Plan.

The Board has the discretion to make amendments to this Plan which it may deem necessary, without having to obtain shareholder approval including, without limitation:

(a) minor changes of a "housekeeping nature";

(b) amending Options under this Plan, including with respect to the Option Period (provided that the period during which an Option is exercisable does not exceed 10 years from the date the Option is granted and that such Option is not held by an Insider), vesting period, exercise method and frequency, subscription price (provided that such Option is not held by an Insider) and method of determining the subscription price, assignability and effect of termination of a Participant's employment or cessation of the Participant's directorship;

(c) changing the class of Participants eligible to participate under this Plan;

(d) accelerating the vesting of any Option;

(e) extending the expiration date of any Option provided that the period during which an option is exercisable does not exceed 10 years from the date the Option is granted and provided that such Option is not held by an Insider, and where such Option is held by an Insider in such case, shareholder approval shall be obtained in connection with the extension;

(f) changing the terms and conditions of any financial assistance which may be provided by the Corporation to Participants to facilitate the purchase of Common Shares under this Plan; and

(g) adding a cashless exercise feature, payable in cash or securities, which provides for a full deduction of the number of underlying Common Shares from this Plan reserve.

Shareholder approval will be required in the case of: (i) any amendment to the amendment provisions of this Plan; (ii) any increase in the maximum number of Common Shares issuable under this Plan; (iii) any reduction in the exercise price or extension of the Option Period benefiting an insider of the Corporation; and (iv) any amendment to remove or exceed the Insider Participation Limit, in addition to such other matters that may require shareholder approval under the rules and policies of the Exchange.

19. Necessary Approvals

The obligation of the Corporation to issue and deliver Common Shares in accordance with this Plan and Options granted hereunder is subject to applicable securities legislation and to the receipt of any approvals that may be required from any regulatory authority or stock exchange having jurisdiction

over the securities of the Corporation. If Common Shares cannot be issued to a Participant upon the exercise of an Option for any reason whatsoever, the obligation of the Corporation to issue such Common Shares shall terminate and any funds paid to the Corporation in connection with the exercise of such Option will be returned to the relevant Participant (or his Eligible Assignee) as soon as practicable.

20. Stock Exchange Rules

This Plan and any option agreements entered into hereunder shall comply with the requirements from time to time of the Exchange.

21. Market Fluctuations

No amount will be paid to, or in respect of, a Participant (or any Eligible Assignee) under the Plan to compensate for a downward fluctuation in the price of Common Shares, nor will any other form of benefit be conferred upon, or in respect of, a Participant (or any Eligible Assignee) for such purpose.

The Corporation makes no representations or warranties to Participants (or any Eligible Assignee) with respect to the Plan or the Options whatsoever. Participants (and any Eligible Assignees) are expressly advised that the value of any Options in the Plan will fluctuate as the trading price of Common Shares fluctuates.

In seeking the benefits of participation in the Plan, a Participant (and each Eligible Assignee) agrees to exclusively accept all risks associated with a decline in the market price of Common Shares whether before or after the exercise of Options and all other risks associated with participation in the Plan.

22. Right to Issue Other Shares

The Corporation shall not by virtue of this Plan be in any way restricted from declaring and paying stock dividends, issuing further Common Shares, varying or amending its share capital or corporate structure or conducting its business in any way whatsoever.

23. Notice

Any notice required to be given by this Plan shall be in writing and shall be given by registered mail, postage prepaid or delivered by courier or by facsimile transmission addressed, if to the Corporation, at its principal address in Toronto, Ontario (Attention: Chief Financial Officer); or if to a Participant (or to an Eligible Assignee), to such Participant at his address as it appears on the books of the Corporation or in the event of the address of any such Participant not so appearing then to the last known address of such Participant; or if to any other person, to the last known address of such person.

24. Gender

Whenever used herein words importing the masculine gender shall include the feminine and neuter genders and vice versa.

25. Interpretation

This Plan will be governed by and construed in accordance with the laws of the Province of Ontario.

This Plan is subject to the approval of the stock exchange or exchanges on which the Common Shares are listed and, if applicable, of the shareholders of the Corporation.

26. Effective Date of Plan

This amended and restated Plan was adopted by the Board on September 22, 2014, it became effective on the date of its initial approval by shareholders of the Corporation on June 9, 2015, it was further amended and restated effective with further approval by the Board on March 14, 2018, and it was further amended and restated effective with shareholder approval on May 29, 2019.

Exhibit 4.2

TITAN MEDICAL INC.

SHARE UNIT PLAN
FOR OFFICERS AND KEY EMPLOYEES

ARTICLE 1
RECITALS

1.1 **Purpose.** Titan Medical Inc. (together with any successor thereto, the "**Corporation**") wishes to establish this Titan Medical Inc. Share Unit Plan (the "**Plan**") in order to:

(a) encourage selected Eligible Employees of the Corporation and its Affiliates to:

(i) acquire a proprietary interest in the growth and performance of the Corporation,

(ii) generate an increased incentive to contribute to the Corporation's future success and prosperity, and

(iii) align the interests of such Eligible Employees with the Corporation's long-term strategy and with the interests of the Corporation's shareholders, and

(b) enhance the ability of the Corporation and its Affiliates to attract and retain exceptionally qualified individuals upon whom, in large measure, the sustained progress, growth and profitability of the Corporation depend.

ARTICLE 2
DEFINITIONS

2.1 **Definitions**. As used in the Plan, the following terms shall have the meanings set forth below:

(a) "**Affiliate**" means: (i) any entity that, directly or through one or more intermediaries, is controlled by the Corporation and (ii) any entity in which the Corporation has a significant equity interest, as determined by the Board.

(b) "**Applicable Law**" means, with respect to any Person, property, transaction, event or other matter, any law, rule, statute, regulation, order, judgment, decree, treaty or other requirement having the force of law (collectively, the "**Law**") relating or applicable to such Person, property, transaction, event or other matter. Applicable Law also includes, where appropriate, any interpretation of the Law (or any part thereof) by any Governmental Body having jurisdiction, or charged with its administration or interpretation.

(c) "**Award**" means any award of Restricted Share Units or Performance Share Units granted under the Plan.

(d) "**Award Agreement**" means any written agreement, contract, or other instrument or document, including an electronic communication, as may from time to time be designated by the Corporation as evidencing any Award granted under the Plan.

(e) "**Board**" means the board of directors of the Corporation as constituted from time to time.

(f) "**Business Day**" means a day, other than a Saturday or Sunday, on which banking institutions in Toronto, Ontario are not authorized or obligated by law to close.

(g) "**Cause**", with respect to a Participant shall, if such Participant has entered into a written employment agreement with the Corporation or an Affiliate that is in force and contains a definition of "**Cause**", have the meaning given to the term in that agreement, or, if no such agreement exists, or if "**Cause**" is not defined therein, then Cause will have the following meaning, provided that the existence of Cause shall be determined in good faith by the Board or a designee of the Board:

(i) misconduct which constitutes a material breach of any of the Participant's obligations to the Corporation, or an Affiliate, including any material obligations set forth in any written agreement governing the terms of the Participant's employment and such breach, if curable, has not been cured within fifteen (15) days after written notice by the Corporation, or the affected Affiliate, to the Participant;

(ii) fraud, embezzlement, theft or other material dishonesty by the Participant with respect to the Corporation, or an Affiliate;

(iii) breach of his or her fiduciary duties to the Corporation, or an Affiliate, or misconduct which has, or could reasonably be expected to have, a material adverse effect upon the business, interests or reputation of the Corporation, or an Affiliate, and such breach or conduct, if curable, has not been cured within fifteen (15) days after written notice by the Corporation, or the affected Affiliate, to the Participant;

(iv) indictment or entering of a guilty plea for any indictable offence or felony or an analogous offence under the laws of another jurisdiction;

(v) refusal or failure to attempt in good faith to follow or carry out the reasonable instructions of the Board which failure, if curable, does not cease within fifteen (15) days after written notice of such failure is given to the Participant by the Board; or

(vi) any other act or omission of the Participant that would at law permit an employer to, without notice or payment in lieu of notice, terminate the employment of such Participant.

Notwithstanding the foregoing, to the extent that an alternative definition of Cause is provided in the Participant's Award Agreement, "Cause" shall have the meaning assigned thereto; provided that any alternative definition of Cause in the Award Agreement shall govern and supersede any alternative definition of Cause in any applicable employment agreement to the extent of any inconsistencies between such definitions.

(h) "**Change of Control**" means any occurrence of the following events:

(i) the completion of a merger, amalgamation, consolidation, reorganization, arrangement or other business combination of the Corporation with or into another corporation (other than a merger, amalgamation, consolidation, reorganization, arrangement or other business combination of the Corporation with any subsidiary);

(ii) the acquisition of all or substantially all of the outstanding common shares of the Corporation pursuant to a take-over bid;

(iii) the sale of all or substantially all of the assets of the Corporation; or

(iv) any other acquisition of the business of the Corporation as determined by the Board.

(i) "**Change of Control Termination**" means**,** provided in each case such event occurs within eighteen (18) months following a Change of Control without the Participant's consent:

(i) any termination by the Corporation of the employment of a Participant, as a result of a Change of Control**;**

(ii) any requirement by the Corporation or by any applicable Affiliate that the Participant's principal office be relocated more than 100 kilometers (or 60 miles as applicable) away from where it was prior to a Change of Control;

(iii) any change in the Participant's title, reporting relationship, responsibilities or authority as in effect immediately prior to any Change of Control which adversely affects to a material degree the Participant's role in the management of the Corporation or of any Affiliate, as applicable;

(iv) any material reduction in value of the Participant's compensation including, but not limited to, salary and any pension plan, stock option plan, investment plan, profit sharing plan, savings plan, bonus plan or life insurance, medical plans or disability plans or other employee benefit plan provided by the Corporation (or by any Affiliate if applicable) to and in which the Participant is participating or under which the Participant is covered, all as in effect immediately prior to any Change of Control; or

(v) the assignment to the Participant, following a Change of Control of any significant, ongoing duties which are inconsistent with the Participant's skills, position (including status, offices, titles and reporting requirements), authority, duties or responsibilities prior to the Change of Control, or any other action by the Corporation or by any applicable Affiliate which results in substantial diminution in such position.

(j) "**Committee**" means the Human Resources or Compensation Committee of the Board or any other committee comprising either the Board or such members or committee(s) of the Board as may be designated by the Board.

(k) "**Disability**" in relation to a Participant means qualification for long-term disability benefits under the long-term disability plan of the Corporation or of an Affiliate.

(l) "**Eligible Employees**" means a regular full-time or part-time employee of the Corporation or of an Affiliate of the Corporation and may at the discretion of the Committee include an employee or officer who is on leave of absence from the Corporation, but does not include a probationary employee, a temporary full-time or part-time employee, or a director of the Corporation unless that director is also a regular full-time or part-time employee of the Corporation.

(m) "**Fair Market Value**" on a particular date shall mean the closing price of the Shares on that date as reported on the TSX for Canadian Eligible Employees, or Nasdaq for American Eligible Employees, or if the TSX or Nasdaq, as applicable, is not open on such date, the immediately preceding date on which the applicable stock exchange is open. If the Shares are not listed and posted for trading on the applicable stock exchange at the relevant time, it shall be the fair market value of the Share, as determined by the Board acting in good faith.

(n) "**Forfeiture Date**" means the date, as determined by the Committee in its discretion, on which a Participant:

(i) resigns from employment with the Corporation or with an Affiliate as contemplated in Section 6.1;

(ii) is terminated for Cause as contemplated in Section 6.2; or

(iii) is terminated by the Corporation or by a Subsidiary without Cause as contemplated in Section 6.3 (not taking into account any period of notice or pay in lieu of notice which follows the Participant's last day of actual and active employment).

(o) "**Governmental Body**" means any government, parliament, legislature, regulatory authority, agency, commission, board or court or other law-making entity, rule-making entity, or regulation-making entity having or purporting to have jurisdiction on behalf of any nation or state or province or other subdivision thereof including any municipality or district or county.

(p) "**Grant Date**" means the date on which an Award is granted pursuant to the Plan.

(q) "**Insider**" means (i) an insider of the Corporation, as defined in the*Securities Act* (Ontario) other than a person who falls within that definition solely by virtue of being a director or senior officer of a subsidiary of the Corporation, and (ii) an associate of any person who is an insider by virtue of (i) above;

(r) "**Market Shares**" mean Shares purchased in the open market on the TSX, Nasdaq, or on any other securities exchange where Shares are traded.

(s) "**Nasdaq**" means the NASDAQ Stock Market LLC or any successor thereto.

(t) "**Participant**" means an Eligible Employee designated to be granted an Award under the Plan.

(u) "**Payment Value**" means the value of an Award on the Vesting Date, which shall be calculated using a formula determined by the Committee at the time of grant based on either (i) the Fair Market Value of one Share as of the day immediately preceding the Vesting Date multiplied by the number of Share Units held by the Participants on the Vesting Date, or (ii) an average of the Fair Market Value of one Share over a specified number of days prior to the Vesting Date multiplied by the number of Share Units held by the Participant on the Vesting Date.

(v) "**Performance Criteria**" means any quantitative and/or qualitative measures, as determined by the Committee, which may be used to measure the level of performance of the Corporation, any applicable Affiliate or any individual Participant during a Vesting Period, and may include arrangements under which the grant, issuance, retention, vesting and/or transferability of any applicable Award is subject to such criteria and such additional conditions or terms as may be designated by the Committee.

(w) "**Performance Multiplier**" has the meaning described in Section 5.2(b).

(x) "**Performance Share Unit**" or "**PSU**" means any right granted under this Plan which is subject to *inter alia*, a Vesting Period and Performance Criteria.

(y) "**Person**" means any individual (whether acting as an executor, trustee, administrator, legal representative or otherwise), corporation, estate, firm, partnership, limited partnership, sole proprietorship, syndicate, joint venture, trustee, trust, association, joint stock company, business trust, limited liability company, government or any department or agency thereof, unincorporated organization or association, and pronouns have a similar extended meaning.

(z) "**Restricted Share Unit**" or "**RSU"** means any right granted under this Plan which is subject to, *inter alia*, a Vesting Period.

(aa) "**Retirement**" means the retirement of a Participant from the employ of the Corporation or any Affiliate whereupon the Participant does not take up full-time employment with any other employer so long as the Participant is the holder of any outstanding Award, provided that in all cases, Retirement of a Participant will not be deemed to have occurred unless the Participant is at least 65 years of age at the time of Retirement.

(bb) "**Share Compensation Arrangement**" means any stock option performance share unit, restricted share unit, stock option plan, share unit plan, long-term or short-term incentive plan, employee stock purchase plan or any other compensation or incentive mechanism involving the issuance or potential issuance of Shares, including a purchase of Shares from treasury which is financially assisted by the Corporation by way of loan, guarantee or otherwise;

(cc) "**Shares**" mean the common shares of the Corporation and such other securities as may become the subject of Awards, or become subject to Awards, pursuant to an adjustment made pursuant to the provisions of Article 4 of the Plan.

(dd) **"Share Units**" mean, collectively, Performance Share Units and Restricted Share Units.

(ee) **"Strike Price**" means no less than the closing price of the Shares on the last Trading Day prior to the Grant Date.

(ff) **"Tax Act**" means the *Income Tax Act* (Canada), as amended from time to time.

(gg) "**Trading Day**" means any day on which the TSX or Nasdaq is open for business.

(hh) "**TSX**" means the Toronto Stock Exchange or any successor thereto.

(ii) "**Vesting Date**" means the last Trading Day of the Vesting Period determined in accordance with Sections 5.2(a) and 5.2(b).

(jj) "**Vesting Period**" means any period as determined by the Committee, during which period the Participant who is the beneficiary of an Award must remain continuously employed by the Corporation or by any Affiliate, unless otherwise provided for in this Plan. A Participant will be considered employed by the Corporation or an Affiliate only up until the Participant's last day of actual and active employment with the Corporation or Affiliate, not including any notice period. For greater certainty, no period of notice of termination or pay in lieu thereof that is given (or that ought to have been given) in respect of any termination of employment will be considered as extending a Participant's period of employment for the purpose of determining his or her entitlements under this Plan. In case of doubt as to an individual's status as an Eligible Employee during the Vesting Period, the determination of the Committee shall be final.

2.2 **Extended Meanings**. In this Plan, words importing the singular number include the plural and vice versa and words importing the masculine gender include the feminine and neuter genders and vice versa.

2.3 **Calculation of Time Periods**. In this Agreement, except as otherwise expressly provided, when calculating the period of time within which or following which any act is to be done or step taken, such period will exclude the first day referenced in the period and include the last day referenced in the period and if the last day of the period is not a Trading Day, the period in question will end on the next Trading Day.

2.4 **Headings**. The division of this Plan into articles, sections, and subsections, and the use of headings, is for convenience of reference only and will not modify or affect the interpretation or construction of this Agreement.

2.5 **Use of the word Including**. The word "includes" or "including" shall mean "includes without limitation" or "including without limitation", respectively.

ARTICLE 3
ADMINISTRATION

3.1 **Committee to Interpret Plan.** Except as otherwise provided herein, the Plan shall be administered by the Committee, which shall have the power to interpret the Plan and to adopt such rules and guidelines for implementing the terms of the Plan as it may deem appropriate. The Committee shall have the ability to modify the Plan provisions, to the extent necessary, or delegate such authority, to accommodate any changes in Applicable Law in jurisdictions in which Participants will receive Awards.

3.2 **Power of the Committee**. Subject to the terms of the Plan and Applicable Law, the Committee shall have full power and authority to:

(a) designate Participants;

(b) determine the type or types of Awards to be granted to each Participant under the Plan;

(c) determine the number of Share Units to be covered by Awards (or to determine whether any payments, rights, or other matters are to be calculated in connection with Awards);

(d) determine the terms and conditions of any Award;

(e) determine whether, to what extent, and under what circumstances Awards may be settled or exercised in cash, Market Shares, other securities or other Awards, or cancelled, forfeited, or suspended, and the method or methods by which Awards may be settled, exercised, cancelled, forfeited, or suspended;

(f) determine any acceleration of exercisability or vesting, or waiver of termination or forfeiture regarding any Share Unit, based on such factors as the Committee may determine;

(g) determine whether, to what extent, and under what circumstances cash, Market Shares, other securities, other Awards, and other amounts payable with respect to an Award under the Plan shall be deferred either automatically or at the election of the holder thereof or of the Committee;

(h) interpret and administer the Plan and any instrument or agreement relating to, or Award made under, the Plan;

(i) establish, amend, suspend, or waive such rules and guidelines;

(j) appoint such agents as it shall deem appropriate for the proper administration of the Plan;

(k) make any other determination and take any other action that the Committee deems necessary or desirable for the administration of the Plan; and

(l) correct any defect, supply any omission, or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem desirable to carry the Plan into effect.

3.3 **Procedure**. The following shall be the process for the granting of Awards:

(a) the Board shall have the sole power, prerogative and authority to grant Share Units to Participants;

(b) the Committee shall be responsible for recommending any grant of Share Units, and shall do so by making a written proposal to the Board at a regularly scheduled Board meeting, setting out the following:

(i) the name of the Participants,

(ii) with respect to each grant of Share Units,

(A) the number allocated,

(B) the proposed Grant Date,

(C) the Performance Criteria and Performance Multiplier (only with respect to grants of Performance Share Units),

(D) the Vesting Period and the Vesting Date,

(E) the formula for calculating the Payment Value, and

(F) any other applicable restrictions, which restrictions may lapse separately or in combination at such time or times, in such instalments or otherwise, as the Committee may deem appropriate;

(c) if there is no undisclosed material information regarding the Corporation at the meeting at which the grants are approved, the date of such meeting shall be considered the Grant Date; if there is undisclosed material information at such meeting, the Grant Date shall be the second Trading Day after the disclosure by the Corporation of such information;

(d) upon approval of a grant of Awards by the Board and within one (1) Trading Day after the Grant Date, the Chair of the Committee or his delegate, shall calculate the Strike Price applicable for the relevant Grant Date, and shall then report all approved grants to the Corporation's accounting and human resource departments; and

(e) the administrative processing of the grants shall be completed in not more than four (4) Trading Days from the date of the report referred to in subclause 3.3(d) above, including the issuance to Participants of a notice indicating at least all of the information referred to in sub-clause 3.3(b)(ii) above.

3.4 **Administration of the Plan**. Unless otherwise expressly provided in the Plan, all designations, determinations, interpretations, and other decisions under or with respect to the Plan or any Award shall be within the sole discretion of the Committee, may be made at any time, and shall be final, conclusive, and binding upon all Persons, including the Corporation, any Affiliate, any Participant, any holder or beneficiary of any Award, any shareholder, and any employee of the Corporation or of any Affiliate.

3.5 **Number of Shares to be issued under the Plan.**

Under the Plan and all of the other Share Compensation Plans:

(a) the maximum number of Shares issuable pursuant to outstanding Share Units and all other Share Compensation Arrangements, shall not exceed 15% of the Shares outstanding from time to time;

(b) the number of Shares of the Corporation that may be issued to any single Participant and his, her or its associates within any one-year period may not exceed 5% of the issued and outstanding securities of the Corporation;

(c) the number of Shares of the Corporation that may be issuable to any single Participant and his, her or its associates may not exceed 5% of the issued and outstanding securities of the Corporation;

(d) the number of Shares of the Corporation issuable to Insiders, at any time, under all Share Compensation Arrangements, cannot exceed 15% of the issued and outstanding securities of the Corporation; and

(e) the number of Shares of the Corporation issued to Insiders, within any one year period, under all Share Compensation Arrangements, cannot exceed 15% of the issued and outstanding securities of the Corporation.

ARTICLE 4
ADJUSTMENT OF AWARDS

4.1 **Adjustments for Awards**. In the event that the Committee shall determine that any dividend or other distribution (whether in the form of cash, Shares, or other securities), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Corporation, issuance of warrants or other rights to purchase Shares or other securities of the Corporation, or other similar corporate transaction or event or otherwise affects the Shares, then the Committee shall adjust the following in a manner that is determined by the Committee to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan:

(a) the number and type of Share Units subject to outstanding Awards;

(b) the grant, purchase, or exercise price with respect to any Award, or, if deemed appropriate, make provision for a cash payment to the holder of an outstanding Award; and

(c) other value determinations applicable to outstanding Awards;

provided, however, that the number of Performance Share Units or Restricted Share Units, as applicable, subject to any Award shall always be a whole number.

4.2 **Adjustments of Awards Upon Certain Acquisitions**. In the event the Corporation or any Affiliate shall assume outstanding employee compensation awards or the right or obligation to make such future compensation awards in connection with the acquisition of another business or another corporation or business entity, the Committee may make such adjustments, not inconsistent with the terms of the Plan, in the terms of Awards as it shall deem appropriate in order to achieve reasonable comparability or other equitable relationship between the assumed obligations and the Awards granted under the Plan as so adjusted.

4.3 **Adjustments of Awards Upon the Occurrence of Certain Unusual or Nonrecurring Events**. The Committee shall be authorized to make adjustments in the terms and conditions of, and the criteria included in, Awards in recognition of unusual or nonrecurring events affecting the Corporation, any Affiliate, or the financial statements of the Corporation or any Affiliate, or of changes in Applicable Law, or accounting principles, whenever the Committee determines that such adjustments are appropriate in order to prevent dilution or enlargement of the benefits or potential benefits to be made available under the Plan.

4.4 **Treatment of Dividends**. Notwithstanding any provision of Section 4.1 above, dividends declared by the Corporation, if any, shall be treated as if they had been invested in purchasing additional Restricted Share Units or Performance Share Units, as applicable, which shall be computed by dividing: (a) the amount obtained by multiplying the amount of the dividend declared and paid per Share by the number of Shares used in calculating the Award of Share Units recorded in the Participant's account on the record date for the payment of such dividend, by (b) the Fair Market Value for the trading date immediately following the relevant dividend record date, with fractions computed to three decimal places.

ARTICLE 5
AWARDS

5.1 **Evidence of Share Units**. Any Share Units granted under the Plan will be evidenced by an Award Agreement between the Corporation and the Participant, which agreement will contain terms and conditions consistent with the Plan and as approved by the Board.

5.2 **Vesting and Performance Metric.**

(a) For RSUs, unless otherwise determined by the Committee and stated in the Award Agreement, the Vesting Date shall be on the third (3^{rd}) anniversary of the Grant Date. Vesting for RSUs is based solely on a Participant's continued employment with the Corporation or Affiliate throughout the Vesting Period.

(b) For PSUs, unless otherwise determined by the Committee and stated in the Award Agreement, the Vesting Date shall be on the third (3^{rd}) anniversary of the Grant Date. Each Award Agreement will describe the Performance

Criteria that must be achieved for such PSUs to vest as of the end of the Vesting Period, provided the Participant is continuously employed by or in service with the Corporation or any of its Affiliates from the Grant Date until such Vesting Date. The Award Agreement may provide that the number of Shares that each PSU entitles the Participant to, being one Share, will be multiplied by a factor (the "Performance Multiplier") such that each PSU will entitle the Participant to more than or less than one Share. The number of PSUs that will vest as of the end of the Vesting Period will be:

(i) the number of PSUs allocated, subject to meeting the Performance Criteria, or

(ii) if a Performance Multiplier is used, the number of PSUs allocated, subject to meeting the Performance Criteria, multiplied by the Performance Multiplier.

5.3 **Awards may be Granted Separately or Together**. Awards may, in the discretion of the Committee, be granted either alone or in addition to, in tandem with, or in substitution for, any other Award or any compensation award granted under any other plan of the Corporation or of any Affiliate. Awards granted in addition to or in tandem with other Awards, or in addition to or in tandem with compensation awards granted under any other plan of the Corporation or any Affiliate, may be granted either at the same time as or at a different time from the grant of such other Awards or obligations.

5.4 **Payment under Awards**. Except as provided in the Award Agreement or any other provision of this Plan, all of the vested Share Units covered by a particular grant and any related Share Units credited pursuant to Section 4.4 will be settled on the first Business Day following the Vesting Date for the Payment Value, but in no event later than December 31 of the third calendar year following the year in which the Grant Date in respect of the Share Units occurred. Subject to the terms of the Plan and of any applicable Award Agreement, payments or transfers to be made by the Corporation or an Affiliate upon the settlement of an Award may be made in such form or forms as the Committee shall determine, including, without limitation, cash, Market Shares, Shares issued from treasury other securities or other Awards, or any combination thereof, and may be made in a single payment or transfer.

5.5 **Limits on Transfer of Awards**. Except as provided by the Committee, no Award and no right under any such Award, shall be assignable, alienable, saleable, or transferable by a Participant otherwise than by will or by the laws of descent and distribution; provided, however, that, if so determined by the Committee, a Participant may, in the manner established by the Committee, designate a beneficiary or beneficiaries to exercise the rights of the Participant with respect to any Award upon the death of the Participant. Each Award, and each right under any Award, shall be exercisable, during the Participant's lifetime, only by the Participant or, if permissible under Applicable Law, by the Participant's guardian or legal representative. No Award, and no right under any such Award, may be pledged,

alienated, attached, or otherwise encumbered, and any purported pledge, alienation, attachment, or encumbrance thereof shall be void and unenforceable against the Corporation or any Affiliate.

5.6 **Conditions and Restrictions Upon the Share Units Subject to Awards**. The Committee may provide that any Share Units which are subject to or issued under an Award shall be subject to such further agreements, restrictions, conditions or limitations as the Committee in its discretion may specify prior to the grant, vesting or settlement of such Award, including without limitation, conditions on vesting or transferability and forfeiture or repurchase provisions or provisions on payment of taxes arising in connection with an Award. Notwithstanding the provisions of this Section 5.6 or any other provisions of the Plan, any and all Performance Share Units or Restricted Share Units, as applicable, subject to or issued under an Award must be settled and paid by December 31 of the third calendar year of the year following the year in which the services giving rise to the award were rendered. In addition, all Shares issued to Persons in the United States pursuant to the Plan will be issued pursuant to the registration requirements of the United States Securities Act of 1933, as amended, or an exemption from such registration requirements.

ARTICLE 6
TERMINATION of employment

6.1 **Voluntary Resignation of the Participant**. If a Participant resigns from employment with the Corporation or with an Affiliate (other than as a result of a Change of Control Termination, Retirement, death or Disability), the Participant shall, effective on the relevant Forfeiture Date, cease to be a Participant, and the former Participant shall forfeit all rights in respect of the Participant's Awards. All such Awards shall be cancelled effective at the commencement of the relevant Forfeiture Date and no distribution shall be made to the former Participant in relation to such forfeited Awards under the Plan.

6.2 **Termination for Cause**. If the employment of a Participant with the Corporation or with an Affiliate is terminated for Cause (other than as a result of a Change of Control Termination), the Participant shall, effective on the relevant Forfeiture Date, cease to be a Participant, and the former Participant shall forfeit all rights in respect of the Participant's Awards. All such Awards shall be cancelled effective at the commencement of the relevant Forfeiture Date and no distribution shall be made to the former Participant in relation to such forfeited Awards under the Plan.

6.3 **Termination Without Cause**. If the employment of a Participant with the Corporation or with an Affiliate is terminated without Cause (other than as a result of a Change of Control Termination), any unvested Awards will vest at the end of the relevant Vesting Period based upon a ratio where the numerator is the number of months such former Participant was employed during the relevant Vesting Period (rounded down to the nearest whole number) and the denominator is the total number of months of the relevant Vesting Period. With respect to any Awards of Performance

Share Units, any accelerated vesting will be determined by the Committee and may vary depending on the specific nature of the performance-based vesting condition and the proration of the unvested PSUs.

6.4 **Change of Control Termination**. If the employment of a Participant with the Corporation or with an Affiliate is affected by a Change of Control Termination, all unvested Awards shall vest immediately upon the Change of Control Termination and the Participant shall be entitled to the benefits of such Awards as though the Vesting Date is the date of Change of Control Termination, provided however that the Participant shall have the option of exercising his or her rights under the Awards at any later date in the calendar year in which the Change of Control Termination occurs, subject to Applicable Law. For the purposes of this paragraph, all Performance Criteria with respect to any Performance Share Units shall be deemed to have been met at target on the relevant Vesting Date.

6.5 **Death, Disability or Retirement.**

(a) *Death*. If a Participant dies before all or a portion of such Awards have vested, any unvested Awards will vest at the end of the relevant Vesting Period based upon a ratio where the numerator is the number of months such deceased Participant was employed during the relevant Vesting Period (rounded down to the nearest whole number) and the denominator is the total number of months of the relevant Vesting Period. With respect to any Awards of Performance Share Units, the ratio specified in the previous sentence is subject to any Performance Criteria applicable to the relevant Award of Performance Share Units, and to the Committee's interpretation regarding whether these Performance Criteria have been met. The Committee will be under no obligation to perform its obligations pursuant to the provisions of this Section 6.5(a) until the Committee receives satisfactory evidence of the Participant's death from the authorized legal representative of the deceased Participant.

(b) *Disability or Retirement.* If a Participant ceases to be an Eligible Employee of the Corporation or an Affiliate due to Retirement or Disability, any unvested Awards will vest at the end of the relevant Vesting Period based upon a ratio where the numerator is the number of months such former Participant was employed during the relevant Vesting Period (rounded down to the nearest whole number) and the denominator is the total number of months of the relevant Vesting Period. With respect to any Awards of Performance Share Units, the ratio specified in the previous sentence is subject to any Performance Criteria applicable to the relevant Award of Performance Share Units, and to the Committee's interpretation regarding whether these Performance Criteria have been met.

6.6 **Discretion with Respect to Unvested Award.** Notwithstanding any provision of this Article 6, the Committee, in its sole discretion, may approve the vesting or settlement of any unvested Awards which result from any activities described in Sections 6.1,

6.2, 6.3, 6.4 or 6.5 above. Settlement of any Payment Value resulting from the exercise of any rights referenced in this ARTICLE 6 may be made in cash, Market Shares or other securities pursuant to the provisions of the applicable Award Agreement or pursuant to any other agreement, written or otherwise, as applicable.

ARTICLE 7
AMENDMENT AND TERMINATION of plan

7.1 **Amendment and Termination of the Plan**. Except to the extent prohibited by Applicable Law and unless otherwise expressly provided in an Award Agreement or in the Plan:

(a) *Amendments to the Plan.* The Committee may amend, alter, suspend, discontinue, or terminate the Plan, in whole or in part; *provided*, *however*, that if shareholder approval is required by Applicable Law or by regulation or rule of the TSX or Nasdaq, no material amendment shall be made without the prior approval of the Corporation's shareholders.

(b) *Amendments to Awards.* The Committee may waive any conditions or rights under, amend any terms of, or amend, alter, suspend, discontinue, or terminate, any Awards theretofore granted, prospectively or retroactively. No such amendment or alteration shall be made which would impair the rights of any Participant, without such Participant's consent, under any Award theretofore granted, provided that no such consent shall be required with respect to any amendment or alteration if the Committee determines in its sole discretion that such amendment or alteration either: (i) is required or advisable in order for the Corporation, the Plan or the Award to satisfy or conform to any Applicable Law or to meet the requirements of any accounting standard, or (ii) is not reasonably likely to significantly diminish the benefits provided under such Award.

(c) No such amendment to the Plan shall cause the Plan to cease to be a plan described in paragraph (k) of the definition of "salary deferral arrangement" in subsection 248(1) of the Tax Act or any successor to such provision.

ARTICLE 8
GENERAL PROVISIONS

8.1 **No Rights to Awards**. No Eligible Employee, Participant or other Person shall have any claim to be granted any Award under the Plan, or, having been selected to receive an Award under this Plan, to be selected to receive a future Award, and further there is no obligation for uniformity of treatment of Eligible Employees, Participants, or holders or beneficiaries of Awards under the Plan. The terms and conditions of Awards need not be the same with respect to each recipient.

8.2 **No Voting Rights**. Under no circumstances shall Awards of Share Units entitle any Participant to exercise voting rights or any other rights attaching to the ownership of

Shares or other securities of the Corporation, nor shall any Participant be considered the owner of Shares by virtue of receiving Share Units pursuant to an Award.

8.3 **Withholding**.

(a) So as to ensure that the Corporation or any Affiliate, as applicable, will be able to comply with the applicable provisions of any federal, provincial, state or other law relating to the withholding of tax or other required deductions (including on the amount, if any, includable in the income of an Eligible Employee) the Corporation or any Affiliate, as applicable, may withhold or cause to be withheld from any amount payable to an Eligible Employee under this Plan as may be necessary to permit the Corporation or any such Affiliate, as applicable, to so comply (the **"Applicable Withholding Taxes**").

(b) It is the responsibility of the Participant to complete and file any tax returns which may be required within the periods specified in applicable laws as a result of the Participant's participation in the Plan. The Corporation shall not be held responsible for any tax consequences to a Participant as a result of the Participant's participation in the Plan.

(c) For greater certainty, unless not required under the Tax Act or any other applicable law, no Share Units will be settled until:

(i) an amount sufficient to cover the Applicable Withholding Taxes payable on the settlement of Share Units has been received by the Corporation (or withheld by the Corporation from any other remuneration owed to the Participant); or

(ii) the Participant undertakes to arrange for such number of Shares to be sold as is necessary to raise an amount equal to the Applicable Withholding Taxes, and to cause the proceeds from the sale of such Shares to be delivered to the Corporation.

8.4 **No Limit on Other Compensation Arrangements**. Nothing contained in the Plan shall prevent the Corporation or any Affiliate from adopting or continuing in effect other or additional compensation arrangements and such arrangements may be either generally applicable or applicable only in specific cases.

8.5 **No Right to Employment**. The grant of an Award shall be construed as giving a Participant the right to be retained in the employ of the Corporation or any Affiliate. Further, the Corporation or an Affiliate may at any time dismiss a Participant from employment, free from any liability, or any claim under the Plan, unless otherwise expressly provided in the Plan or in any Award Agreement.

8.6 **Governing Law**. The validity, construction, and effect of the Plan and any rules and regulations relating to the Plan shall be determined in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein without regard to conflict of law.

8.7 **Severability**. If any provision of the Plan or any Award is or becomes or is deemed to be invalid, illegal, or unenforceable in any jurisdiction or under any Applicable Law, or as to any Person or Award, or would disqualify the Plan or any Award under any law deemed applicable by the Committee, such provision shall be construed or deemed amended to conform to such law, or if it cannot be so construed or deemed amended without, in the determination of the Committee, materially altering the intent of the Plan or the Award, such provision shall be stricken as to such jurisdiction, Applicable Law, Person, or Award, and the remainder of the Plan and any such Award shall remain in full force and effect.

8.8 **No Trust or Fund Created.** Neither the Plan nor any Award shall create or be construed to create a trust or separate fund of any kind or a fiduciary relationship between the Corporation or any Affiliate and a Participant or any other Person. To the extent that any Person acquires a right to receive payments from the Corporation or any Affiliate pursuant to an Award, such right shall be no greater than the right of any unsecured general creditor of the Corporation or any Affiliate.

8.9 **No Fractional Market Shares**. No fractional Market Shares shall be delivered pursuant to the Plan or any Award. Any fractional Market Shares which would otherwise be delivered pursuant to the Plan or any Award will be settled in cash.

8.10 **No Representations or Covenants with Respect to Tax Qualification**. Although the Corporation may endeavour to: (i) qualify an Award for favourable Canadian or foreign tax treatment or (ii) avoid adverse tax treatment, the Corporation makes no representation to that effect and expressly disavows any covenant to maintain favourable or avoid unfavourable tax treatment. The Corporation shall be unconstrained in its corporate activities without regard to the any potential negative tax affects to holders of Awards under the Plan.

8.11 **Awards to Foreign Employees**. The Committee shall have the power and authority to determine which Affiliates shall be covered by this Plan and which employees who are located in a country other than Canada and the United States shall be eligible to participate in the Plan. The Committee may adopt, amend or rescind rules, procedures or sub-plans relating to the operation and administration of the Plan to accommodate the specific requirements of local laws, procedures, and practices. Without limiting the generality of the foregoing, the Committee is specifically authorized to adopt rules, procedures and sub-plans with provisions that limit or modify: (i) rights on death, disability or retirement or on termination of employment; (ii) available methods of exercise or settlement of an award; (iii) payment of income, social insurance contributions and payroll taxes; (iv) the withholding procedures and handling of any indicia of ownership which vary with national or local requirements of foreign jurisdictions. The Committee may also adopt rules, procedures or sub-plans applicable to particular Affiliates or locations. The rules set forth in Schedule A to this Plan apply to any Participant who is a U.S. Taxpayer (as defined therein) and form a part of this Plan.

8.12 **Compliance with Laws**. The granting of Awards under the Plan shall be subject to: (i) all Applicable Laws, (ii) such approvals by all applicable Governmental Bodies, or (iii) such approvals by the TSX or any other applicable stock exchange on which the securities of the Corporation are listed, as may be required. The Corporation shall have no obligation to provide Awards of Share Units under the Plan prior to:

(a) obtaining any approvals from all Governmental Bodies that the Corporation determines in its sole discretion are necessary or advisable; and

(b) completion of any registration or other qualification of the Share Units (if applicable) under all Applicable Laws or all of the rulings of all applicable Governmental Bodies that the Corporation determines in its sole discretion to be necessary or advisable or at a time when any such registration or qualification is not current, has been suspended or otherwise has ceased to be effective.

The inability or impracticability of the Corporation to obtain or maintain authority from any Governmental Body having jurisdiction, which authority is deemed by the Corporation's counsel to be necessary to the lawful issuance and sale of any Share Units under the Plan shall relieve the Corporation of any liability in respect of the failure to issue or sell such Share Units as to which such requisite authority shall not have been obtained.

ARTICLE 9
EFFECTIVE DATE OF THE PLAN, TERM

9.1 **Effective Date of the Plan, Term.** The Plan shall be effective as of the date of its approval by the Board and required approval from the shareholders of the Corporation.

SCHEDULE A

PLAN PROVISIONS APPLICABLE TO U.S. TAXPAYERS

The provisions of this Schedule "A" apply to Share Units held by a U.S. Taxpayer to the extent such Share Units are subject to U.S. Taxation. The following provisions apply, notwithstanding anything to the contrary in the Plan. All capitalized terms used in this Schedule "A" and not defined herein, shall have the meaning attributed to them in the Plan.

"**Section 409A**" means Section 409A of the United States Internal Revenue Code and the regulations and authority promulgated thereunder.

"**U.S. Taxpayer**" shall mean any person who is a U.S. citizen, U.S. permanent resident, or other person who has been granted or is eligible to be granted a Deferred Share Unit under the Plan that is otherwise subject to U.S. taxation.

For the avoidance of doubt, nothing in Section 6.3 or Section 6.5 of the Plan shall result in the acceleration of payment/settlement of Awards, and Awards will be settled in accordance with Section 5.4 of the Plan on the first Business Day following the Vesting Date set forth in the applicable Award Agreement or determined by application of Sections 5.2(a) or (b) of the Plan.

Section 6.4 of the Plan is replaced in its entirety with the following:

> **6.4 Change of Control Termination**. If the employment of a Participant with the Corporation or with an Affiliate is affected by a Change of Control Termination that occurs following a Change of Control that meets the definition of "change in control event" within the meaning of Section 409A, all unvested Awards shall vest immediately upon the Change of Control Termination, provided that such Change in Control Termination also constitutes a "separation from service" within the meaning of Section 409A. In such case the Participant shall be entitled to the benefits of such Awards as though the Vesting Date is the date of such Change of Control Termination. For the purposes of this paragraph, all Performance Criteria with respect to any Performance Share Units shall be deemed to have been met at target on the relevant Vesting Date. Notwithstanding the foregoing, if any U.S. Taxpayer is determined to be a "specified employee" (as determined under Section 409A, in accordance with the Corporation's policies) at the time of the Change in Control Termination, then settlement of the Award shall not occur until the earlier of the date that is six (6) months following his or her separation from service and the Vesting Date set forth in the applicable Award Agreement or determined by application of Section 5.2(a) or (b) of the Plan. If a Change of Control Termination is not in connection with a Change of Control that meets the definition of "change in control event" within the meaning of Section 409A, all unvested Awards will become vested upon such Change of Control Termination in accordance

with this Section 6.4, but payment/settlement will occur on the Vesting Date set forth in the applicable Award Agreement or determined by application of Sections 5.2(a) or (b), unless earlier payment/settlement is otherwise permitted under Section 409A.

Notwithstanding Sections 5.6 and 6.6, the exercise of the Committee's discretion will not result in a change in the time of settlement/payment of an Award. No provision of the Plan or amendment to the Plan may permit the acceleration or deferral of payments under the Plan to U.S. Taxpayers contrary to the provisions of Section 409A.

In the event of a termination of the Plan, no payments to U.S. Taxpayers shall be made, except on the schedule permitted by Section 409A.

All provisions of the Plan shall continue to apply to the U.S. Taxpayer to the extent they have not been specifically modified by this Schedule "A". In regard to a U.S. Taxpayer, the Committee shall interpret all Plan provisions in a manner that does not cause a violation of Section 409A.

TITAN MEDICAL INC.

DEFERRED SHARE UNIT PLAN

ARTICLE 1 INTRODUCTION

1.1 Purpose

The purpose of this Deferred Share Unit Plan is to provide directors of Titan Medical Inc. (the "**Corporation**") with the opportunity to acquire Deferred Share Units (as defined herein) of the Corporation in order to allow them to participate in the long-term success of the Corporation and to promote a greater alignment of their interests with the interests of the Corporation's shareholders.

ARTICLE 2 INTERPRETATION

2.1 Definitions

For purposes of the Plan:

(a) "**Account**" means an account maintained by the Corporation for each Participant and which will be credited by means of a book-keeping entry with DSUs that are granted in accordance with the terms of this Plan and the DSU Agreements;

(b) "**Applicable Withholding Amounts**" is defined in Section 4.7(a) of the Plan;

(c) "**Black Out Period**" means the period of time when, pursuant to any policies of the Corporation, any securities of the Corporation may not be traded by certain persons as designated by the Corporation, including any Participant that holds a DSU;

(d) "**Board**" means the Board of Directors of the Corporation as may be constituted from time to time;

(e) "**Cash Payment**" is defined in Section 4.7(a) of the Plan;

(f) "**Committee**" means the Compensation Committee of the Board or such other committee of the Board as may be appointed by the Board to administer the Plan, provided, however, that if no such committee is in existence at any particular time and the Board has not appointed another committee of the Board to administer the Plan, all references in the Plan to "Committee" shall at such time be in reference to the Board;

(g) "**Corporation**" means Titan Medical Inc. and includes any successor corporation;

(h) "**Deferred Share Unit**" or "**DSU**" means a unit equivalent in value to a Share, credited by means of a bookkeeping entry in the books of the Corporation in accordance with Article 4;

(i) "**Distribution Date**" is defined in Section 4.6 of the Plan;

(j) "**Distribution Value**" means, with respect to each Deferred Share Unit credited to a Participant's Account, the Fair Market Value per Share;

(k) "**Dividend Equivalents**" means a bookkeeping entry whereby each Deferred Share Unit is credited with the equivalent amount of the dividend paid on a Share in accordance with Section 4.3;

(l) "**Dividend Market Value**" means the Fair Market Value per Share on the dividend record date;

(m) "**DSU Agreement**" is defined in Section 5.11 of the Plan;

(n) "**Eligible Director**" means an individual who is, at the relevant time, a member of the Board;

(o) "**Exchange**" means the TSX or Nasdaq or, if the Shares are not then listed and posted for trading on the TSX or Nasdaq, such stock exchange on which such Shares are listed and posted for trading and on which the majority of the trading volume and value of such Shares occurs;

(p) "**Fair Market Value**" with respect to a Share, as at any date, means the weighted average of the prices at which the Shares traded on the TSX (or, if the Shares are not then listed and posted for trading on the TSX or are then listed and posted for trading on more than one stock exchange, on such stock exchange on which the majority of the trading volume and value of the Shares occurs) for the five (5) trading days on which the Shares traded on the said exchange immediately preceding such date. In the event that the Shares are not listed and posted for trading on any stock exchange, the Fair Market Value shall be the fair market value of the Shares as determined by the Board in its sole discretion, acting reasonably and in good faith;

(q) "**Insider**" has the meaning ascribed thereto in Part I of the TSX Company Manual, as amended from time to time;

(r) "**Nasdaq**" means the NASDAQ Stock Market LLC;

(s) "**Participant**" means an Eligible Director who is granted DSU's in accordance with Section 4.1 hereof;

(t) "**Payment Shares**" is defined in Section 4.8 of the Plan;

(u) "**Person**" means any individual, sole proprietorship, partnership, firm, entity, unincorporated association, unincorporated syndicate, unincorporated organization, trust, body corporate, fund, organization or other group of organized persons, government, government regulatory authority, governmental department, agency, commission, board, tribunal, dispute settlement panel or body, bureau, court, and where the context requires any of the foregoing when they are acting as trustee, executor, administrator or other legal representative;

(v) "**Plan**" means this Deferred Share Unit Plan as amended, restated, supplemented or otherwise modified from time to time;

(w) "**Security Based Compensation Arrangement**" has the meaning ascribed thereto in Part VI of the TSX Company Manual, as amended from time to time;

(x) "**Separation Date**" means the earliest date on which the Participant is no longer a member of the Board of the Corporation nor is otherwise employed by the Corporation or any of its Subsidiaries in any fashion;

(y) "**Share**" means a common share of the Corporation or, in the event of an adjustment contemplated by Section 4.10, such other number or type of securities as the Committee may determine;

(z) "**Subsidiary**" has the meaning ascribed thereto in the Securities Act (Ontario);

(aa) "**TSX**" means the Toronto Stock Exchange; and

(bb) "**TSX Company Manual**" means the Toronto Stock Exchange Company Manual, as amended from time to time.

2.2 Interpretation

(a) Words in the singular include the plural and words in the plural include the singular. Words importing male persons include female persons, corporations or other entities, as applicable. The headings in this document are for convenience and reference only and shall not be deemed to alter or affect any provision hereof. The words "hereto", "herein", "hereby", "hereunder", "hereof" and similar expressions mean or refer to this document as a whole and not to any particular Article, Section, paragraph or other part hereof.

(b) Whenever the Board or, where applicable, the Committee or any sub-delegate of the Committee is to exercise discretion in the administration of the terms and conditions of this Plan, the term "discretion" means the sole and absolute discretion of the Board or the Committee or the sub-delegate of the Committee, as the case may be.

(c) Unless otherwise specified, all references to money amounts are to Canadian currency.

ARTICLE 3 ADMINISTRATION OF THE PLAN

3.1 Administration of the Plan

(a) Except for matters that are under the jurisdiction of the Board as specified under the Plan or as required by law and subject to Sections 3.1(b), this Plan will be administered by the Committee and the Committee has sole and complete authority, in its discretion, to:

(i) interpret and construe any provision hereof and decide all questions of fact arising in their interpretation;

(ii) adopt, amend, suspend and rescind such rules and regulations for administration of this Plan as the Board may deem necessary in order to comply with the requirements of this Plan, in order to conform to any law or regulation or to any change in any laws or regulations applicable thereto, or in order to ensure that the plan qualifies and remains qualified as a "prescribed plan or arrangement" for the

purposes of the definition of "salary deferral arrangement" in the *Income Tax Act* (Canada);

(iii) exercise rights reserved to the Corporation under the Plan;

(iv) take any and all actions permitted by this Plan;

(v) prescribe forms for notices to be prescribed by the Corporation under the Plan; and

(vi) make any other determinations and take such other action in connection with the administration of this Plan that it deems necessary or advisable.

provided that the Committee shall not exercise its authority in a manner that would cause the Plan to cease to qualify as a "prescribed plan or arrangement" for the purposes of the definition of "salary deferral arrangement" in the *Income Tax Act* (Canada). The Committee's determinations and actions under this Plan are final, conclusive and binding on the Corporation, the Participants and all other Persons.

(b) To the extent permitted by applicable law, the Committee may, from time to time, delegate to any specified officer of the Corporation all or any of the powers of the Committee. In such event, the specified officer will exercise the powers delegated to it by the Committee in the manner and on the terms authorized by the Committee. Any decision made or action taken by the specified officer arising out of or in connection with the administration or interpretation of this Plan in this context is final, binding and conclusive on the Corporation, the Participants and all other Persons.

3.2 Determination of Value if Shares Not Publicly Traded

If the Shares are not publicly traded on the Exchange at the relevant time such that the Distribution Value and/or the Dividend Market Value cannot be determined in accordance with the definitions of those terms, such values shall be determined by the Committee acting in good faith, or in the absence of the Committee, by the Board acting in good faith.

3.3 Eligibility

Any individual who at the relevant time is an Eligible Director is eligible to participate in the Plan. Eligibility to participate does not confer upon any individual a right to receive an award of Deferred Share Units pursuant to the Plan.

3.4 Exemption from Plan Participation

Notwithstanding any other provision of the Plan, if a Participant is resident in a jurisdiction in which an award of Deferred Share Units under the Plan might be considered to be income which is subject to taxation at the time of such award, the Participant may elect not to participate in the Plan by providing a written notice to the Chief Financial Officer of the Corporation.

3.5 Discretionary Relief

Notwithstanding any other provision hereof, the Board may, in its sole discretion, waive any condition set out herein if it determines that specific individual circumstances warrant such waiver.

ARTICLE 4 DEFERRED SHARE UNITS

4.1 Grant of Deferred Share Units

(a) The Committee may, from time to time in its sole discretion, grant DSUs to Eligible Directors and upon such grant, such Eligible Directors shall become Participants in this Plan. In respect of each grant of DSUs, the Committee shall determine:

(i) the number of DSUs allocated to the Participant; and

(ii) such other terms and conditions of the DSUs applicable to each grant.

(b) The Corporation shall not make any grant of DSU's pursuant to the Plan unless and until such grant or issuance and delivery can be completed in compliance with all applicable laws, including requirements set out in the Income Tax Regulations (Canada) for the Plan to qualify as a "prescribed plan or arrangement" for the purposes of the definition of "salary deferral arrangement" in the Income Tax Act (Canada), and all other regulations, rules, orders of governmental or regulatory authorities and the requirements of all applicable stock exchanges upon which Shares are listed. The Corporation shall be obligated to take all reasonable action to comply with any such laws, regulations, rules, orders or requirements.

(c) Certificates will not be issued to evidence DSUs. Book entry accounts, to be known as the "**Deferred Share Unit Account**" shall be maintained by the Corporation for each Participant and will be credited with DSUs granted to a Participant from time to time.

(d) The term during which a DSU may be outstanding shall, subject to the provisions of this Plan requiring or permitting the acceleration or the extension of the term, be such period as may be determined from time to time by the Board or the Committee, but subject to the rules of any stock exchange or other regulatory body having jurisdiction.

4.2 Vesting

Deferred Share Units will be fully vested upon being granted and credited to a Participant's Account.

4.3 Credits for Dividends

A Participant's Account shall be credited with Dividend Equivalents in the form of additional Deferred Share Units as of each dividend payment date in respect of which normal cash dividends are paid on the Shares. Such Dividend Equivalents shall be computed by dividing: (a) the amount obtained by multiplying the amount of the dividend declared and paid per Share by the number of Deferred Share Units recorded in the Participant's Account on the record date for the payment of such dividend, by (b) the Dividend Market Value, with fractions computed to three decimal places. The foregoing does not obligate the Corporation to declare or pay dividends on Shares and nothing in this Plan shall be interpreted as creating such an obligation.

4.4 Limits on Issuances

Notwithstanding any other provision of this Plan:

(a) the maximum number of Shares issuable pursuant to outstanding DSUs at any time shall be limited to 5% of the aggregate number of issued and outstanding Shares, provided that the maximum number of Shares issuable pursuant to outstanding DSUs and all other

Security Based Compensation Arrangements, shall not exceed 15% of the Shares outstanding from time to time;

(b) the number of Shares issuable to Insiders, at any time, under all Security Based Compensation Arrangements, shall not exceed 15% of the issued and outstanding Shares; and

(c) the number of Shares issued to Insiders, within any one-year period, under all Security Based Compensation Arrangements, shall not exceed 15% of the issued and outstanding Shares.

For the purposes of this Section 4.4, any increase in the issued and outstanding Shares (whether as a result of the issue of Shares pursuant to DSUs or otherwise) will result in an increase in the number of Shares that may be issued pursuant to DSUs outstanding at any time. Further, if the acquisition of Shares by the Corporation for cancellation should result in the foregoing tests no longer being met, this shall not constitute non-compliance with this Section 4.4 for any awards outstanding prior to such purchase of Shares for cancellation.

DSUs that are cancelled, terminated or expire shall result in the Shares that were reserved for issuance thereunder being available for a subsequent grant of DSUs pursuant to this Plan to the extent of any Shares issuable thereunder that are not issued under such cancelled, terminated or expired DSUs.

Upon Cash Payment being made or Payment Shares being issued in settlement of DSUs, the number of Shares reserved for issuance in respect of such DSUs automatically become available to be made the subject of new DSUs, provided that the total number of Shares reserved for issuance under the Plan and all other Security Based Compensation Arrangements does not exceed 15% of the issued and outstanding Shares of the Corporation.

4.5 Reporting of Deferred Share Units

Statements of the Deferred Share Unit Accounts will be provided to Participants on an annual basis.

4.6 Distribution Date Election

A Participant shall have the right to receive Payment Shares or, upon the joint election of the Corporation and the Participant, Cash Payment or a combination of Cash Payment and Payment Shares in respect of Deferred Share Units recorded in the Participant's Account in accordance with Sections 4.7 or 4.8, on one of the following dates (the "**Distribution Date**"):

(a) on a date to be determined by the Corporation no later than 90 days following the Separation Date; or

(b) such later date as the Participant may elect by written notice delivered to the Chief Financial Officer of the Corporation prior to the Separation Date, provided that in no event shall a Participant be permitted to elect a date which is later than December 1st of the calendar year following the calendar year in which the Separation Date occurs.

4.7 Distribution of Deferred Share Units as Cash Payment

In the event the Corporation and the Participant jointly elect to settle Deferred Share Units by way of a Cash Payment:

(a) subject to and in accordance with Section 4.7(b), a Participant shall receive a payment equal in value to the number of Deferred Share Units recorded in the Participant's Account on the Distribution Date that the Corporation and the Participant jointly elect to settle by way of payment in cash multiplied by the Distribution Value of a Share on the Distribution Date (the "**Cash Payment**"). The Corporation is authorized to deduct from the Cash Payment an amount equivalent to the minimum amount of taxes and other minimum amounts as the Corporation may be required by law to withhold, as the Corporation determines (the "**Applicable Withholding Amounts**"). Upon payment in full of the value of the Deferred Share Units, less the Applicable Withholding Amounts, the Deferred Share Units shall be cancelled, and no further payments shall be made to the Participant under the Plan; and

(b) the Cash Payment less any Applicable Withholding Amounts, will be paid to the Participant in cash within ten (10) business days after the Distribution Date, or in the event of the Participant's death, his beneficiary or legal representative in accordance with Section 4.9 herein.

4.8 Distribution of Deferred Share Units in Payment Shares

Subject to Section 4.7, Deferred Share Units shall be settled by the issuance of Payment Shares as follows:

(a) The Corporation shall within 10 business days after the Distribution Date issue to the Participant a number of treasury Shares equal to the number of Deferred Share Units in the Participant's Account that became payable on the Distribution Date (the "Payment Shares").

(b) Subject to Section 4.12 of this Plan, as a condition to the issue of treasury Shares in settlement of any Deferred Share Units, the Corporation may require the Participant to first pay to the Corporation, or the Corporation may deduct, an amount equivalent to the Applicable Withholding Amounts or the Corporation may take such other steps as it considers to be necessary or appropriate, including the sale of Payment Shares on behalf of the Participant, in order to provide to the Corporation the Applicable Withholding Amounts. The Corporation shall advise the Participant in writing of any Applicable Withholding Amounts required in connection with the issue of Shares in settlement of Deferred Share Units.

(c) The Corporation shall not be required to issue or cause to be delivered treasury Shares or issue or cause to be delivered certificates evidencing Shares to be delivered in settlement of any DSUs, unless and until such issuance and delivery can be completed in compliance with the applicable laws, regulations, rules, orders of governmental or regulatory authorities and the requirements of all applicable stock exchanges upon which Shares are listed. The Corporation shall be obligated to take all reasonable action, on a timely basis, to comply with any such laws, regulations, rules, orders, or requirements.

(d) If Shares may not be issued pursuant to any DSUs due to any Black Out Period, such Share issuance shall occur seven business days following the end of the Black-Out Period (or such longer period as permitted by applicable regulatory authorities and approved by the Committee).

(e) No fractional Shares shall be issued upon the settlement of DSUs. If a Participant would otherwise become entitled to a fractional Share upon the settlement of a DSU, such

Participant shall only have the right to receive the next lowest whole number of Shares and no payment or other adjustment will be made with respect to the fractional interest so disregarded.

(f) All Payment Shares issued to Persons in the United States pursuant to the Plan will be issued pursuant to the registration requirements of the United States Securities Act of 1933, as amended, or an exemption from such registration requirements.

4.9 Death of Participant Prior to Distribution

Upon the death of a Participant prior to the distribution of the Deferred Share Units credited to the Account of such Participant under the Plan, Payment Shares or, upon the joint election of the Corporation and the executor or administrator of the Participant's estate, Cash Payment or a combination of Cash Payment and Payment Shares shall be issued or paid to the estate of such Participant on or about the thirtieth (30th) day after the Corporation is notified of the death of the Participant or on a later date elected by the Participant's estate in the form prescribed for such purposes by the Corporation and delivered to the Chief Financial Officer of the Corporation not later than twenty (20) days after the Corporation is notified of the death of the Participant, provided that such elected date is no later than the last business day of the calendar year following the calendar year in which the Participant dies so that payment can be made on or before such last business day. Any Cash Payment shall be equivalent to the amount which would have been paid to the Participant pursuant to and subject to Section 4.7, calculated on the basis that the day on which the Participant dies, or the date elected by the estate, as applicable, is the Distribution Date. Upon settlement under this Section 4.9 of the Deferred Share Units credited to the Account of a Participant, subject to any Applicable Withholding Amounts, the Deferred Share Units shall be cancelled, and no further distributions or payments will be made from the Plan in relation to the Participant.

4.10 Adjustments to Deferred Share Units

In the event: (a) of any change in the Shares through subdivision, consolidation, reclassification, amalgamation, merger or otherwise; or (b) that any rights are granted to all or substantially all shareholders to purchase Shares at prices substantially below Fair Market Value as of the date of grant (other than the payment of dividends in respect of the Shares as contemplated by Section 4.3); or (c) that, as a result of any recapitalization, merger, consolidation or other transaction, the Shares are converted into or exchangeable for any other securities or property, then the Board may make such adjustments to this Plan, the Account of each Participant, the DSU Agreements and the Deferred Share Units outstanding under this Plan as the Board may, in its sole discretion, consider appropriate in the circumstances to prevent dilution or enlargement of the rights granted to Participants hereunder and\or to provide for the Participants to receive and accept such other securities or property in lieu of Shares, and the Participants shall be bound by any such determination.

4.11 U.S. Taxpayers

The rules set forth in Schedule A to this Plan apply to any Participant who is a U.S. Taxpayer (as defined therein) and form a part of this Plan.

4.12 Taxes

(a) A Participant shall be solely responsible for reporting and paying income tax payable in respect of any Cash Payment or Shares received by the Participant under this Plan. The Corporation will provide each Participant who is resident in Canada with (or cause each Participant to be provided with) a T4 slip or such information return as may be required by

applicable law to report income, if any, arising upon the grant or exercise of rights under this Plan by a Participant who is resident in Canada for income tax purposes.

(b) Further to Section 4.8(b) of this Plan, the Corporation shall have the power and the right to deduct or withhold, or require (as a condition of exercise) a Participant to remit to the Corporation, the Applicable Withholding Amounts to satisfy, in whole or in part, federal, provincial, and local taxes, domestic or foreign, required by law to be withheld with respect to any taxable event arising as a result of this Plan, including the grant or exercise of Deferred Share Units granted under this Plan. With respect to Applicable Withholding Amounts, the Corporation shall have the irrevocable right to (and the Participant consents to the Corporation) setting off any amounts required to be withheld, in whole or in part, against amounts otherwise owing by the Corporation to such Participant (whether arising pursuant to the Participant relationship as an officer or employee of the Corporation or as a result of the Participant providing services on an ongoing basis to the Corporation or otherwise), or may make such other arrangements as are satisfactory to the Participant and the Corporation. In addition, the Corporation may elect, in its sole discretion, to satisfy the Applicable Withholding Amounts, in whole or in part, by withholding such number of Payment Shares as it determines are required to be sold by the Corporation, as trustee, to satisfy the Applicable Withholding Amounts net of selling costs (which costs shall be the responsibility of the Participant and which shall be and are authorized to be deducted from the proceeds of sale). The Participant consents to such sale and grants to the Corporation an irrevocable power of attorney to effect the sale of such Payment Shares and acknowledges and agrees that the Corporation does not accept responsibility for the price obtained on the sale of such Payment Shares. Any reference in this Plan to the issuance of Payment Shares or a payment of cash is expressly subject to this paragraph 4.12(b).

ARTICLE 5 GENERAL

5.1 Amendment, Suspension, or Termination of Plan

(a) The Board may amend, suspend or discontinue this Plan or amend any DSU or DSU Agreement at any time without the consent of a Participant, provided that such amendment shall not adversely alter or impair the rights of any Participant in respect of any DSU previously granted to such Participant under the Plan, except as otherwise permitted hereunder. In addition, the Board may, by resolution, amend this Plan and any DSU granted under it (together with any related DSU Agreement) without shareholder approval, provided however, that at any time while the Shares are listed for trading on the TSX, the Board will not be entitled to amend this Plan or any DSU granted under it (together with any related DSU Agreement) without shareholder and, if applicable, TSX approval: (i) to increase the maximum number of Shares issuable pursuant to this Plan; (ii) to permit the assignment or transfer of a DSU other than as provided for in this Plan; (iii) to add to the categories of persons eligible to participate in this Plan; (iv) to remove or amend Section 4.4(b) or Section 4.4(c); (v) to remove or amend this Section 5.1(a); or (vi) in any other circumstances where TSX and shareholder approval is required by the TSX.

(b) Without limitation of Section 5.1(a), the Board may correct any defect or supply any omission or reconcile any inconsistency in this Plan in the manner and to the extent deemed necessary or desirable, may establish, amend, and rescind any rules and regulations relating to this Plan, and may make such determinations as it deems necessary or desirable for the administration of this Plan.

(c) If the Board terminates or suspends the Plan, previously credited DSUs will remain outstanding and in effect in accordance with the terms of the Plan. If DSUs remain outstanding after Plan termination or suspension, such DSUs shall not be entitled to Dividend Equivalents unless at the time of termination or suspension the Committee determines that the entitlement to Dividend Equivalents after termination or during suspension, as applicable, should be continued. Subject to the foregoing sentence, if the Board terminates or suspends the Plan, no new Deferred Share Units will be credited to the Account of a Participant.

(d) The Board shall not require the consent of any affected Participant in connection with a termination of the Plan in which Payment Shares are issued to the Participant in respect of all such Deferred Share Units.

5.2 Compliance with Laws

The administration of the Plan shall be subject to and made in conformity with all applicable laws and any applicable regulations of a duly constituted regulatory authority. Should the Committee, in its sole discretion, determine that it is not feasible or desirable to carry out a distribution of Deferred Share Units due to such laws or regulations, its obligation shall be satisfied by means of an equivalent cash payment (equivalence being determined on a before-tax basis). If the Committee determines that the listing, registration or qualification of the Shares subject to this Plan upon any securities exchange or under any provincial, state, federal or other applicable law, or the consent or approval of any governmental body or stock exchange is necessary or desirable, as a condition of, or in connection with, the crediting of DSUs or the issue of Payment Shares hereunder, the Corporation shall be under no obligation to credit DSUs or issue Payment Shares hereunder unless and until such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Committee.

5.3 Reorganization of the Corporation

The existence of any Deferred Share Units shall not affect in any way the right or power of the Corporation or its shareholders to make or authorize any adjustment, recapitalization, reorganization or other change in the Corporation's capital structure or its business, or to create or issue any bonds, debentures, shares or other securities of the Corporation or to amend or modify the rights and conditions attaching thereto or to effect the dissolution or liquidation of the Corporation, or any amalgamation, combination, merger or consolidation involving the Corporation or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar nature or otherwise.

5.4 Assignment

Rights and obligations under the Plan may be assigned by the Corporation to a successor in the business of the Corporation, any company resulting from any amalgamation, reorganization, combination, merger or arrangement of the Corporation, or any company acquiring all or substantially all of the assets or business of the Corporation.

5.5 DSUs Non-Transferable

Except as required by law, the rights of a Participant hereunder are not capable of being assigned, transferred, alienated, sold, encumbered, pledged, mortgaged or charged and are not capable of being subject to attachment or legal process for the payment of any debts or obligations of the Participant.

5.6 Participation is Voluntary; No Additional Rights

The participation of any Participant in the Plan is entirely voluntary and not obligatory and shall not be interpreted as conferring upon such Participant any rights or privileges other than those rights and privileges expressly provided in the Plan. In particular, participation in the Plan does not constitute a condition of employment or service nor a commitment on the part of the Corporation to ensure the continued employment or service of such Participant. Nothing in this Plan shall be construed to provide the Participant with any rights whatsoever to participate or continue participation in this Plan or to compensation or damages in lieu of participation, whether upon termination of service as an Eligible Director or otherwise. The Corporation does not assume responsibility for the personal income or other tax consequences for the Participants and they are advised to consult with their own tax advisors.

5.7 No Shareholder Rights

Under no circumstances shall Deferred Share Units be considered Shares or other securities of the Corporation, nor shall they entitle any Participant to exercise voting rights or any other rights attaching to the ownership of Shares or other securities of the Corporation, nor shall any Participant be considered the owner of Shares by virtue of the award of Deferred Share Units.

5.8 Unfunded and Unsecured Plan

Unless otherwise determined by the Board, the Plan shall be unfunded and the Corporation will not secure its obligations under the Plan. To the extent any Participant or his or her estate holds any rights by virtue of a grant of Deferred Share Units under the Plan, such rights (unless otherwise determined by the Board) shall be no greater than the rights of an unsecured creditor of the Corporation.

5.9 Market Fluctuations

No amount will be paid to, or in respect of, a Participant under the Plan to compensate for a downward fluctuation in the price of Shares, nor will any other form of benefit be conferred upon, or in respect of, a Participant for such purpose. The Corporation makes no representations or warranties to Participants with respect to the Plan or the Shares whatsoever. In seeking the benefits of participation a Participant agrees to accept all risks associated with a decline in the market price of Shares.

5.10 Participant Information

Each Participant shall provide the Corporation with all information (including personal information) required by the Corporation in order to administer the Plan. Each Participant acknowledges that

information required by the Corporation in order to administer the Plan may be disclosed to the Board and other third parties in connection with the administration of the Plan. Each Participant consents to such disclosure and authorizes the Corporation to make such disclosure on the Participant's behalf.

5.11 DSU Agreement

To acquire DSUs, a Participant shall enter into an agreement with the Corporation in such form as determined by the Board from time to time (the **DSU Agreement**"), within such time period and in such manner as specified by the Board. If a DSU Agreement is not entered into within the time and manner specified, the Corporation reserves the right to revoke the crediting of DSUs to the Participant's Account.

5.12 Currency

All amounts paid or values to be determined under this Plan shall be in Canadian dollars unless stated otherwise.

5.13 Effective Date of the Plan

This Plan becomes effective on a date to be determined by the Board.

5.14 Governing Law

The Plan shall be governed by, and interpreted in accordance with, the laws of the Province of Ontario and the laws of Canada applicable therein, without regard to principles of conflict of laws.

APPROVED by the Board this 29 day of April, 2019.

SCHEDULE A

PLAN PROVISIONS APPLICABLE TO U.S. TAXPAYERS

The provisions of this Schedule "A" apply to Deferred Share Units held by a U.S. Taxpayer to the extent such Deferred Share Units are subject to U.S. Taxation. The following provisions apply, notwithstanding anything to the contrary in the Plan. All capitalized terms used in this Schedule "A" and not defined herein, shall have the meaning attributed to them in the Plan.

"**Section 409A**" means Section 409A of the United States Internal Revenue Code and the regulations and authority promulgated thereunder.

"**Separation Date**" shall mean the date on which the Participant incurs a "separation from service" within the meaning of Section 409A.

"**U.S. Taxpayer**" shall mean any person who is a U.S. citizen, U.S. permanent resident, or other person who has been granted or is eligible to be granted a Deferred Share Unit under the Plan that is otherwise subject to U.S. taxation.

1. Notwithstanding Section 3.4 of the Plan, each election by a U.S. Taxpayer not to participate in the Plan or to decline participation for a particular year, must be irrevocably made not later than the end of the calendar year prior to the year for which the Deferred Share Units are granted. Notwithstanding the prior sentence, for U.S. Taxpayers who become Eligible Directors for the first time in any calendar year, an election pursuant to Section 3.4 may be made at any time within 30 days after an initial grant of DSUs is made to such Eligible Director. Such election shall only be effective with respect to DSU grants made after the written notice described in Section 3.4 has been received by the Chief Financial Officer of the Corporation.

2. Notwithstanding Section 4.6 of the Plan, the following procedure shall be used to determine a Distribution Date for Deferred Share Units that are subject to this Schedule A.

    (a) An Eligible Director who is a U.S. Taxpayer shall have the right to elect, at his or her option, to receive the distribution of all amounts credited to his or her Deferred Share Unit Account on any date (the "**Distribution Date**") within the period commencing on his or her Separation Date, and ending on December 1, of the first calendar year following the year in which the Separation Date occurs. Such election shall be made by written notice delivered to the Chief Financial Officer of the Corporation not later than the end of the calendar year prior to the year for which the Deferred Share Units are granted. If no election is made, the Distribution Date shall be the Separation Date, subject to clause (b) below.

    (b) Notwithstanding the foregoing, if any U.S. Taxpayer is determined to be a "specified employee" (as determined under Section 409A, in accordance with the Corporation's policies) at the Separation Date, then the Distribution Date shall not be earlier than the date that is six (6) months following his or her Separation Date.

3. Notwithstanding Section 4.8(d) of the Plan (and except as required pursuant to Section 2(b) of this Schedule A), the issuance of Shares shall not be delayed beyond the end of the year in which the Distribution Date occurs, or, if later, the date that is 2 ½ months after the Distribution Date, unless the Committee reasonably anticipates that the issuance of Shares would violate federal securities

laws of other applicable laws, in which case Shares will be issued at the earliest date at which the Committee reasonably anticipates that issuance of Shares would not cause such violation.

4. Notwithstanding Section 4.9 of the Plan or any election by the Participant of a Distribution Date, upon the death of a Participant prior to the distribution of his or her Deferred Share Unit Account, an issuance of Payment Shares or, upon the joint election of the Corporation and the executor or administrator of the Participant's estate, a Cash Payment or a combination of Cash Payment and Payment Shares shall be issued or paid to the estate of such Participant on the first business day that occurs following 90 days after the Participant's date of death and such date will be the Distribution Date. No election of an alternative payment date by the estate or beneficiary shall be permitted.

5. Notwithstanding anything to the contrary in the Plan, no consent to an amendment, suspension or termination that adversely affects the Deferred Share Units previously granted to a U.S. Taxpayer under Section 409A shall be required if such amendments are considered by the Committee, on the advice of counsel, to be necessary or desirable in order to avoid adverse U.S. tax consequences to the U.S. Taxpayer.

   No provision of the Plan or amendment to the Plan may permit the acceleration of payments under the Plan to U.S. Taxpayers contrary to the provisions of Section 409A.

   In the event of a termination of the Plan, no payments to U.S. Taxpayers shall be made, except on the schedule permitted by Section 409A.

   All provisions of the Plan shall continue to apply to the U.S. Taxpayer to the extent they have not been specifically modified by this Schedule "A". In regard to a U.S. Taxpayer, the Committee shall interpret all Plan provisions in a manner that does not cause a violation of Section 409A.

6. Restrictions on Deferred Share Units of Certain Dual Taxpayers. Notwithstanding anything in the Plan to the contrary, if the Deferred Share Units of a U.S. Taxpayer are subject to tax under both the income tax laws of Canada and the income tax laws of the United States, the following special rules regarding forfeiture will apply. For greater clarity, these forfeiture provisions are intended to avoid adverse tax consequences under Section 409A and/or under paragraph 6801(d) of the regulations under the Income Tax Act (Canada) (the "ITA"), that may result because of the different requirements as to the time of redemption of Deferred Share Units (and thus the time of taxation) with respect to a U.S. Taxpayer's "Separation from Service" under Section 409A and the U.S. Taxpayer's Separation Date (under Canadian tax law). The intended consequence of this Section 6 of this Schedule A is that payments to such U.S. Taxpayer in respect of Deferred Share Units will only occur if such U.S. Taxpayer experiences both a Separation from Service under Code Section 409A and a termination or loss of office within the meaning of paragraph 6801(d) of the regulations under the ITA. If such a U.S. Taxpayer does not experience both a Separation from Service and a termination or loss of office within the meaning of paragraph 6801(d) of the ITA, such Deferred Share Units shall instead be immediately and irrevocably forfeited, including, but not limited to, the following situations:

   (a) a U.S. Taxpayer experiences a Separation from Service as a result of ceasing to be a member of the Board of the Corporation (and any related entity that is considered the same service recipient under Code Section 409A), but such U.S. Taxpayer continues providing services as an employee of the Corporation or a corporation related to the Corporation within the meaning of the ITA such that no Separation Date has occurred; and

(b) an Eligible Director who is a U.S. Taxpayer experiences a termination or loss of office for any reason such that a Separation Date occurs, but continues to provide services to the Corporation (or any related entity that is considered the same service recipient under Code Section 409A) as an independent contractor such that he has not experienced a Separation from Service.

Exhibit 12.1

CERTIFICATION REQUIRED BY RULE 13a-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, David J. McNally, certify that:

1. I have reviewed this annual report on Form 20-F of Titan Medical Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditor and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: April 2, 2020

By: /s/ David J. McNally
David J. McNally
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 12.2

CERTIFICATION REQUIRED BY RULE 13a-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Stephen D. Randall, certify that:

1. I have reviewed this annual report on Form 20-F of Titan Medical Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditor and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: April 2, 2020

By: /s/ Stephen D. Randall
Stephen D. Randall
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 13.1

CERTIFICATION PURSUANT TO
18 U.S.C. §1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Titan Medical Inc. (the "Company") on Form20-F for the period ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David J. McNally, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in this Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

April 2, 2020

/s/ David J. McNally
David J. McNally
President and Chief Executive Officer
(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to Titan Medical Inc. and will be retained by Titan Medical Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 13.2

CERTIFICATION PURSUANT TO
18 U.S.C. §1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Titan Medical Inc. (the "Company") on Form20-F for the period ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Stephen D. Randall, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in this Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

April 2, 2020

/s/ Stephen D. Randall
Stephen D. Randall
Chief Financial Officer
(Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906 has been provided to Titan Medical Inc. and will be retained by Titan Medical Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

TITAN MEDICAL INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE YEAR ENDED DECEMBER 31, 2019

(IN UNITED STATES DOLLARS)

This Management's Discussion and Analysis ("MD&A") is dated March 30, 2020.

This MD&A provides a review of the performance of Titan Medical Inc. ("Titan" or the "Company") and should be read in conjunction with its audited financial statements for the year ended December 31, 2019 (and the notes thereto) (the "Financial Statements"). The Financial Statements have been prepared in accordance with International Financial Reporting Standards, ("IFRS"). All financial figures are in United States Dollars ("US $") except where otherwise noted.

Internal Control over Financial Reporting

During the year ended December 31, 2019, no changes were made to the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Forward-Looking Statements

This discussion includes certain statements that may be deemed "forward-looking statements". All statements in this discussion other than statements of historical facts that address future events, developments or transactions that the Company expects, are forward-looking statements. These forward-looking statements are made as of the date of this MD&A. Forward-looking statements are frequently, but not always, identified by words such as "expects", "expected", "expectation", "anticipates", "believes", "intends", "estimates", "predicts", "potential", "projects", "projection", "targeted", "plans", "possible", "milestones", "objectives" and similar expressions, or statements that events, conditions or results "will", "may", "could", or "should" occur or be achieved. Forward-looking statements that may appear in this MD&A include:

- the Company's ability to raise sufficient financing on a timely basis, secure and restore relationships with its suppliers and development partners and retain qualified personnel;
- the Company's business plan consists of the development of computer-assisted robotic surgical technologies for application in MIS comprising its single-port robotic surgical system;
- the Company is planning continued development of a robust training curriculum and post-training assessment tools for surgeons and surgical teams;

- the proposed training curriculum is planned to include cognitivepre-training, psychomotor skills training, surgery simulations, live animal and human cadaver lab training, surgical team training, troubleshooting and an overview of safety;
- post-training assessment will include validation of the effectiveness of those assessment tools;
- the Company's intent to initially pursue gynecologic surgical indications for use of its single-port robotic surgical system;
- the single-port robotic surgical system patient cart is being developed to deliver multi-articulating instruments and 3D high definition vision system into the patient's body cavity through a single access port;
- the Company's technology and research and development objectives and milestones, including any estimated costs, schedules for completion and probability of success and including without limitation the table set forth herein under the heading, "Current Development Plan" and the footnotes thereunder;
- 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 submitting its Investigational Device Exemption ("IDE") application to the U.S. Food and Drug Administration ("FDA") in a timely manner;
- the Company's expectation that it can, in a timely manner, produce the appropriate preclinical and clinical data required for a 510(k) application to the FDA, and Technical File for the CE mark;
- assuming the Company obtains regulatory clearances, the Company's expectation with respect to launching a commercial product in certain jurisdictions;
- the Company's plans to develop its single-port robotic surgical system and the estimated incremental costs (including the status, cost and timing of achieving the development and regulatory milestones disclosed herein);
- the Company's plans to design, create and refine software for production system functionality of the single-port robotic surgical system and the estimated incremental costs (including the status, cost and timing of achieving the development milestones disclosed herein);
- assuming the Company obtains regulatory clearances, the Company's intentions with respect to initiating marketing activities;
- the Company's intention to continue to assess specialized skill and knowledge requirements and recruitment of qualified personnel and partners;
- the Company's intended use of proceeds of any offering of securities;
- the Company's continuing efforts to secure its intellectual property by filing patent applications;

- the Company's expectations with respect to its relationship with its Primary Supplier (as defined herein), including its ability to comply with the terms of the October 3, 2019 letter agreement between the Company and the Primary Supplier;
- the future success of the Company is substantially dependent on funding its research and development program and maintaining the support of its research and development and manufacturing service providers and, in some cases, securing new suppliers and service providers;
- the mandate of the special committee of the Company's board of directors includes a wide range of potential transactions, including financing through equity or debt, licensing, merger or acquisition and to oversee the global search for strategic alternative transactions to maximize shareholder value;
- should the Company be successful in raising sufficient capital, which it may not be, the Company plans to complete paying valid past due invoices and then develop a work plan with input from suppliers that is consistent with the Company's priorities toward milestone achievement having regard to the Company's available capital resources;
- as the Company's Primary Supplier has agreed to waive certain deposit requirements, the Company plans to comply with the specified interim requirements of the supplier until the Company has raised sufficient capital to fund the deposit as described above;
- the Company's expectations with respect to the outcome of its dispute with the Service Provider (as defined herein);
- in any case in which the Company may be unable to normalize supplier relationships, it has identified alternative suppliers of those services;
- the Company will need to replace any product development service provider in the event it should be necessary or desirable to the Company;
- the performance of human surgeries with the single-port robotic surgical system will require an IDE from the FDA, which must be submitted and approved in advance;
- the recruitment of surgeons from multiple hospital sites will be necessary to perform the surgeries. Each of these sites will require approval of their independent Institutional Review Board to approve the studies;
- 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 robotic surgical system;
- insights gained from these preclinical studies have directed the Company to make further product improvements; and
- the Company entered into a second Common Share Purchase Agreement with Aspire Capital Fund, LLC under which Aspire Capital committed to purchase up to US $35.0 million of common shares of Titan at the Company's request from time to time.

Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Forward-looking statements are statements about the future and are inherently uncertain, and actual results of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, such as access to sufficient capital on a timely basis, reliance on third party suppliers, commercial disputes with third party suppliers, current global financial conditions, dependence on key personnel, conflicts of interest, dependency on additional financing, the Company's history of losses, reliance on strategic alliances, the ability to retain key personnel in a highly-competitive employment environment, the possibility of the Company's inability to augment its management team when required, the possibility that the Company's trade secrets and confidential information may be compromised, reliance on third parties for important aspects of the Company's business, uncertainty as to product development and commercialization milestones, results of operations, competition, technological advancements, rapidly changing markets, uncertain market for the Company's products and technology, uncertainty as to the enforceability of the Company's intellectual property, infringement of intellectual property rights of others, scope and cost of insurance and uninsured risks, risks associated with the Company entering into additional long-term contractual arrangements, ability to license other intellectual property rights, government regulation, changes in market conditions and demands and preferences, changes in government policy, exposure to product liability claims, changes in accounting and tax rules, regulatory inquiries, requirements and approvals, contingent liabilities, manufacturing and product defects, stock price volatility, fluctuating financial results and currency fluctuations, uncertainty as to the Company's ability to meet its development and commercialization milestones, uncertainties as to development and manufacturing of a commercially viable product, reliance on external suppliers and development firms, fluctuations in the market prices of the Company's securities, possible future sales by the Company's shareholders of their securities, limited operating history of the Company, the development stage of the Company and its lack of revenue or earnings, fluctuations of the Company's financial results, the possibility that the Company is not able to maintain its "foreign private issuer" status, the possibility of delisting from the Nasdaq or TSX exchanges, the negative impact of COVID-19 on the ability of suppliers of goods and services to provide resources in a timely manner to support the Company's milestones, the negative impact of COVID-19 on present and future demand for robotic surgeries, equipment and supplies, and the negative impact of COVID-19 on the ability of the Company to obtain regulatory approvals as required on a timely basis to accomplish its milestones and objectives.

Please also refer to the risk factors set forth starting on page 17 of the Company's Annual Information Form for the 2018 fiscal year, available on SEDAR at www.sedar.com, which are expressly incorporated by reference into this MD&A.

There may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Other than as specifically required by law, the Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made, or to reflect the occurrence of unanticipated events, whether as a result of new information, future events or results or otherwise. Investors are cautioned that any such statements are not guarantees of future performance and that actual results or developments may differ materially from those projected in the forward-looking statements. Accordingly, investors should not place undue reliance on forward-looking statements.

History and Business

The Company is the successor corporation formed pursuant to two separate amalgamations under the *Business Corporations Act* (Ontario) on July 28, 2008. Titan does not have any subsidiaries.

The address of the Company's corporate office and its principal place of business is 155 University Avenue, Suite 750, Toronto, Ontario, Canada M5H 3B7.

Overall Performance

During the year ended December 31, 2019, the Company was unsuccessful in securing sufficient capital to maintain product development and regulatory activities at a pace that would allow accomplishment of its previously stated milestones. As a result, on October 15, 2019, the Company announced that it had withdrawn all forward-looking statements included in its continuous disclosure documents with respect to the cost and timing of the development of its robotic surgical system beyond the fourth quarter of 2019. On November 7, 2019, the Company announced that it had determined not to proceed with the public offering of units of the Company for which it filed a final short form prospectus on October 31, 2019 (the "October Offering"). The Company does not have sufficient capital to continue the development of its robotic surgical system and there can be no assurance that the Company will be successful in securing additional financing. All statements in this MD&A as to the plans and objectives of the Company with regard to resuming and continuing its development are conditional upon, among other things, the Company raising sufficient financing on a timely basis, securing and restoring relationships with its suppliers and development partners and retaining qualified personnel.

During the year ended December 31, 2019, the Company raised gross proceeds of approximately $34,054,530 ($31,181,983 net of closing costs including cash commission of $2,172,500). See the section below on Financings for more details. For the year ended December 31, 2019, the Company generated a net and comprehensive losses of $41,907,079 (December 31, 2018 - $22,639,272) which included research and development expenditures of $51,418,056 (December 31, 2018 - $32,858,339) and a gain on change in fair value of warrants of $19,800,645 (December 31, 2018 - $17,095,220).

The Company's business plan consists of the development of computer-assisted robotic surgical technologies for application in minimally invasive surgery ("MIS") comprising its single-port robotic surgical system. The system under development includes 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 had proceeded with input from surgeons and operating room staff experienced in MIS, 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 MIS. This approach allowed the Company to design a robotic surgical system 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 was 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 planning continued development of 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. The Company has developed 14 core surgical skills simulation modules for use with the surgeon workstation in the first phase of the comprehensive surgeon training curriculum that the Company is planning for its single-port robotic surgical system.

The Company has continuously evaluated its technologies under development for intellectual property protection through a combination of trade secrets and patent application filings. The Company has continued the filing and prosecution of patents that management believes will validate the novelty of its unique technology. 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 December 31, 2019. As of March 30, 2020, the Company has 85 patent applications and 50 patents.

As part of its development efforts, the Company has established certain milestones related 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 further delayed.

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 and that the capital required to continue development may not be available to the Company.

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 then proceeded to initiate preclinical acute and chronic (survival) live animal and human cadaver procedures according to Good Laboratory Practices ("GLP") during the second quarter of 2019. 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 initiation of the GLP procedures, which from a timing perspective were a priority. The GLP procedures, as well as the HFE studies, were completed during the third quarter of 2019.

During the fourth quarter ended December 31, 2019, the Company completed two of its three fourth quarter milestones including: (i) receipt of a final independent report 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; and (ii) complete User Manual for robotic system setup by operating room staff and surgeon operation of the surgeon workstation, patient cart, instruments and accessories. The third milestone, receipt of ISO 13485 Certification, was expected to be received by year-end 2019, but was delayed in processing and received January 24, 2020.

The future success of the Company is substantially dependent on funding its research and development program and maintaining the support of its research and development and manufacturing service providers and, in some cases, securing new suppliers and service providers.

As of the date of this MD&A, the Company's primary product development supplier (the "Primary Supplier") has stopped all work with regard to the development of the Company's robotic surgical system. Additionally, the Company's relationship with another service provider, Naglreiter Consulting, LLC ("Naglreiter") has deteriorated, resulting in litigation between Naglreiter and the Company. For more information, please see the section "Discussion of Operations", below.

Following the above noted adverse events during second half of 2019, the Company's Board of Directors established a special committee of independent directors to oversee the global search for strategic alternative transactions. The mandate of the special committee includes a wide range of potential transactions, including financing through equity or debt, licensing, merger or acquisition. There can be no assurance that the Company will be successful in securing additional capital or completing a suitable strategic alternative transaction. In the event that the Company is unable to secure additional capital or conclude a suitable strategic alternative transaction, it may be unable to pay down past due invoices or restart product development. It is also possible that in such circumstances the Company's relationships with key service providers may further deteriorate.

Selected Annual Information

The following table summarizes selected financial data reported by the Company for the years ended December 31, 2019, 2018 and 2017 in accordance with IFRS. The information set forth should be read in conjunction with the respective audited financial statements.

	2019	2018	2017
Net Sales	—	—	—
Net and comprehensive loss for the year	$41,907,079	$22,639,272	$33,586,984
Basic & diluted loss per share	$1.37	$1.36	$4.25
Total long-term liabilities	($8,001)	—	—
Total Assets	$3,381,581	$21,915,164	$29,674,610
Dividends	—	—	—

Significant changes in key financial data from 2017 to 2019 can be attributed to the availability of equity financing, the fluctuations of the fair value of warrants and expenditures in connection with the development of the Company's robotic surgical system.

Discussion of Operations

The Company incurred a net and comprehensive loss of $41,907,079 during the year ended December 31, 2019, compared to a net and comprehensive loss in 2018 of $22,639,272. The increase in the loss in 2019 of $19,267,807 is primarily due to an increase of $18,559,717 in research and development expenditures in 2019. Research and development expenditures for the year ended December 31, 2019 were $51,418,056, compared with $32,858,339 for the year ended December 31, 2018.

Total expenses incurred during the year ended December 31, 2019 were $59,726,277. At December 31, 2018, the Company had forecasted total expenses for 2019 to be approximately $64,100,000. The difference between the original forecast and actual expenses incurred is primarily related to reduced research and development costs as a result of a decline in available funding. The reduction in costs was approximately $4,500,000, or 7.0% of total expenses forecasted as of December 31, 2018.

During the first half of 2019, the Company continued to support product development and manufacturing relationships with subcontractors, carried on efforts to globally secure the Company's intellectual property through the patent and licensing process, and continued the development of the Company's single-port robotic surgical system. However, as the Company experienced severe financing challenges during the second half of the year, product development was suspended.

Research and development expenditures (all of which were expensed in the period), for the years ended December 31, 2019 and December 31, 2018, respectively were as follows:

Research and Development Expenditures	Year Ended December 31, 2019	Year Ended December 31, 2018
Intellectual property development	$ 7,321	$ 14,540
Product development	51,410,735	32,843,799
Total	**$ 51,418,056**	**$ 32,858,339**

Research and development expenditures increased considerably in the year ended December 31, 2019 compared to the same period in 2018. This increase was primarily due to an increase in available funding in the first quarter of 2019 that allowed the Company to accelerate product development in the first half of 2019, compared to 2018.

Other expenses, excluding the research and development expenses discussed above and excluding Interest income, Gain on change in fair value of warrants and Warrant liability issue costs as disclosed in the Company's financial statements for the year ended December 31, 2019 were $8,308,221, compared to $5,852,109 in 2018. The increase of $2,456,112 is primarily attributable to higher professional fees expensed in 2019 relating to the withdrawn October Offering that would otherwise have been accounted for as equity and offset with proceeds of the financing, consulting fees, stock-based compensation, and accrued interest to a supplier, partially offset by lower management salaries and fees.

The Company realized $115,584 of interest income on its cash and cash-equivalent balances during the year ended December 31, 2019, and $288,300 for the same periods in 2018. This decrease in interest income is primarily attributed to lower cash balances in its money market account in 2019 compared to 2018.

The impact of the change in fair value of warrants for the year ended December 31, 2019 was a gain of $19,800,645, compared to a gain of $17,095,220 in 2018. The difference of $2,705,425 for the year ended December 31, 2019 reflects both an increase in the number and decrease in the fair value of warrants in 2019 compared to 2018.

Warrant liability issue costs increased to $2,097,031 for the year ended December 31, 2019 from $1,312,344 for the same period in 2018. This increase includes an increase in the funds raised and corresponding costs in March 2019 compared to the funds raised and corresponding costs for the year ended December 31, 2018. In addition, included in the 2019 warrant liability costs is an adjustment of $269,196 relating to the years ended December 31, 2016 and 2017.

Due to a shortfall in capital, on October 3, 2019, the Company and its Primary Supplier entered into a letter agreement providing that until the Company has secured sufficient financing, the requirement that the Company maintain a deposit under an existing agreement 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, $2.0 million which had been paid to the supplier and held as a deposit under the original contract was applied toward the Company's payables for past services rendered by the 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 will then be required to maintain a deposit in that amount. Thereafter, once the Company has made full on time payment of all invoices for a six-month period, the deposit terms will revert to the terms of the existing original agreement.

The Company and its Primary Supplier are in regular communication regarding the Company's capital resources. In the circumstances of the reduction of capital available to the Company to pay the supplier and in particular, the Company not completing the October Offering, the supplier has stopped all development work that the supplier performs for the Company and it has reassigned all of its employees that were previously dedicated to the Company's project to unrelated work. 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 and/or reassign employees and resume product development.

Recently, the Company's relationship with Naglreiter, another service provider to the Company, has deteriorated, resulting in on-going litigation between Naglreiter and the Company. Naglreiter had been engaged by the Company to develop devices associated with the Company's robotic surgical system, in particular, aspects of the instrumentation and the camera system. Prior to litigation, 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, until on October 4, 2019, the Company received a demand letter for payment of all amounts the service provider believed it was owed by the Company (the "Service Provider Demand Letter"). On October 11, 2019, the Company issued a response declining the terms of the demands set out in the Service Provider Demand Letter (the "Company Response Letter"). Pursuant to the Company Response Letter, the Company requested that the service provider cease all work on behalf of the Company.

On October 16, 2019, Naglreiter filed a Complaint for breach of contract against the Company in the U.S. District Court for the Southern District of Florida. The Complaint, which was served on the Company on October 24, 2019, alleges that the Company has not paid the amounts owed under several invoices and, further, that the invoices total approximately $5 million.

On December 5, 2019, the Company filed an Answer, Affirmative Defenses and Counterclaim denying the allegations, asserting defenses to the Complaint, and asserting counterclaims against Naglreiter for (i) breach of contract including that the services that were rendered by Naglreiter were not rendered in a satisfactory manner and that Naglreiter failed to return property paid for by the Company, (ii) fraudulent inducement, (iii) negligent misrepresentation, (iv) indemnification and (v) conversion for refusing to return Titan's property.

On February 13, 2020, Naglreiter filed an Amended Complaint against the Company to add a complaint of unjust enrichment alleging that Naglreiter had conferred benefits on the Company without the Company paying fair market value for them and asked the courts for a constructive trust over certain property of the Company in Naglreiter's possession.

On March 9, 2020, the Company filed an Answer and Affirmative Defenses to the Amended Complaint and an Amended Counterclaim, denying the allegations, asserting defenses to the Amended Complaint, and bringing additional counterclaims of (i) replevin to recover possession of personal property held by Naglreiter, (ii) civil theft for depriving the Company of its right to certain property in Naglreiter's possession and (iii) injunctive relief to have Naglreiter cease and desist the violation of confidentiality provisions in the parties' agreements.

The Company is seeking a return of property having a value of over $4 million as well as the return of amounts paid for work not done or inadequately done by Naglreiter. The Company intends to defend itself vigorously in this matter and pursue all relief to which it is entitled. There is no assurance that the Company will be successful in defending against the complaints or in its counterclaims against Naglreiter.

As the Company raises additional capital, it continues to make payments on valid past due invoices with current suppliers. Should the Company be successful in raising sufficient capital, which it may not be, the Company plans to complete paying valid past due invoices and then develop a work plan with input from suppliers that is consistent with the Company's priorities toward milestone achievement having regard to the Company's available capital resources. As the Company's Primary Supplier has agreed to waive certain deposit requirements, the Company plans to comply with the specified interim requirements of the supplier until the Company has raised sufficient capital to fund the deposit as described above. In any case in which the Company may be unable to normalize supplier relationships, it has identified alternative suppliers of those services.

The Company will need to replace any product development service provider in the event it should be necessary or desirable to the Company. However, the engagement of other service providers will be subject to the availability of sufficient capital, successful negotiation of commercial terms, statements of work, payment terms and possibly, require deposits and/or pre-payments. There is no assurance that the Company will be able to reach any agreement with any alternative supplier on satisfactory terms.

Summary of Quarterly Results

The following is selected financial data for each of the eight most recently completed quarters, derived from the Company's financial statements and calculated in accordance with IFRS. Net and Comprehensive Loss (gain) from operations figures include the effects of adjustments in the valuation of outstanding warrant liability. Basic and diluted loss per share figures are calculated on the basis of the 30:1 consolidation of common shares of the Company ("Common Shares"), which was effected in June 2018.

	Three Months Ended December 31, 2019	Three Months Ended September 30, 2019	Three Months Ended June 30, 2019	Three Months Ended March 31, 2019	Three Months Ended December 31, 2018	Three Months Ended September 30, 2018	Three Months Ended June 30, 2018	Three Months Ended March 31, 2018
Net sales	—	—	—	—	—	—	—	—
Net and Comprehensive Loss (gain) from operations	($2,412,863)	$1,564,196	$14,472,866	$28,282,880	$8,410,702	$7,534,456	$5,885,415	$808,699
Basic and diluted (gain)/loss per share	($0.07)	$0.05	$0.46	$1.22	$0.41	$0.41	$0.47	$0.07

Significant changes in key financial data from the three months ended March 31, 2018 through the three months ended December 31, 2019 reflect the ongoing development of the Company's single-port robotic surgical system. Also included is the requirement to revalue the Company's warrant liability at fair value, with subsequent changes recorded through net and comprehensive loss for the period.

During the fourth quarter of 2019, the Company had net and comprehensive income of $2,412,863 compared to net and comprehensive loss of $8,410,702 for the same period in 2018. This change of $10,823,565 is primarily attributed to the gain on fair value of warrants in 2019 of $6,779,516 which is offset by a significant reduction in research and development expenditures of just $2,078,290, which along with other costs brings the net and comprehensive income to $2,412,863. In contrast, in the fourth quarter of 2018, the loss in the fair value of warrants was $7,166,276, which was offset by significantly higher research and development expenditures of $14,194,003, which along with other costs brings the net and comprehensive income to $8,410,702.

The significant decrease in research and development expenditures is attributed to the reduced funding available in the fourth quarter of 2019 compared to the same period of the prior year. The gain in the fair value of warrants in each period was as a result of the decline in the stock price at quarter end versus its previously reported value, thus reducing the warrant liability

Liquidity and Capital Resources

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.

During the third and fourth quarter of 2019, the Company was unsuccessful in securing sufficient capital to continue product development and preparation for submissions to regulatory authorities. As a result, on October 15, 2019, the Company announced that it had withdrawn all forward-looking statements included in its continuous disclosure documents with respect to the cost and timing of the development of its robotic surgical system beyond the fourth quarter of 2019. On November 7, 2019, the Company announced that it had determined not to proceed with the October Offering.

The ability of the Company to arrange financing in the future will depend in part upon prevailing capital market conditions and the business success of the Company. There can be no assurance that the Company will be successful in its efforts to arrange additional financing on terms satisfactory to the Company, or at all. If adequate funds are not available, or are not available on acceptable terms, the Company may not be able to resume its technology development program. 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, or loss of their investment.

The Company had cash and cash equivalents on hand of $814,492 and accounts payable and accrued liabilities, including the current portion of the lease liability, of $11,433,967 excluding warrant liability at December 31, 2019, compared to $11,471,243 and $6,447,888 respectively, at December 31, 2018. The Company's working capital at December 31, 2019 was a deficit of $9,684,525 excluding warrant liability, compared to working capital of $14,294,791 at December 31, 2018.

The table below sets forth the Company's warrants (by series) that were previously issued and which remain outstanding.

		Issue Date	Expiry Date	Number Issued Note 1	Number Outstanding	Exercise Price (US$)	Exercise Price (CDN$)
TMD.W.T.F	1	16-Nov-15	16-Nov-20	233,740	233,740		48.00
TMD.W.T.G	1	12-Feb-16	12-Feb-21	389,027	386,694		30.00
TMD.W.T.G	1	23-Feb-16	23-Feb-21	58,226	58,226		30.00
TMD.W.T.H	1	31-Mar-16	31-Mar-21	501,831	501,831		36.00
TMD.W.T.H	1	14-Apr-16	31-Mar-21	75,275	75,275		36.00
TMD.W.T.I	1	20-Sep-16	20-Sep-21	569,444	569,444		22.50
TMD.W.T.I	1	27-Oct-16	20-Sep-21	67,667	67,667		22.50
Not Listed	1	16-Mar-17	16-Mar-21	357,787	355,253		15.00
Not Listed	1	29-Jun-17	29-Jun-22	1,612,955	75,810		6.00
Not Listed	1	21-Jul-17	29-Jun-22	370,567	370,567		6.00
Not Listed	1	24-Aug-17	24-Aug-22	563,067	563,067		6.00
Not Listed	1	5-Dec-17	5-Dec-22	1,533,333	1,533,333		18.00
Not Listed	1	10-Apr-18	10-Apr-23	1,126,665	1,126,665		10.50
Not Listed	1	10-May-18	10-Apr-23	168,889	168,889		10.50
Not Listed	2	10-Aug-18	10-Aug-23	7,679,574	6,661,068	2.92	
Not Listed	3	21-Mar-19	21-Mar-24	8,455,882	8,455,882	3.95	
				23,763,929	21,203,411		

Note 1 - After giving effect to the 30:1 Share Consolidation in June 2018
Note 2 - Includes a ratchet clause triggered August 29, 2019 lowering the exercise price from U.S. $3.20 to U.S. $2.92.
Note 3 - Includes a ratchet clause triggered August 29, 2019 lowering the exercise price from U.S. $4.00 to U.S. $3.95.

Development Objectives and Regulatory Plans

The Company has used a combination of internal resources and external development firms to execute the research, development and regulatory plans for the Company's single-port robotic surgical system. Development objectives were previously established to support the Company's planned FDA 510(k) filing for marketing clearance in the U.S., and submittal of a Technical File to a European Notified Body for achievement of the CE mark, which indicates that a product for sale within the European Economic Area has been assessed to conform with health safety and environmental protection requirements.

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 IDE from the FDA, which must be submitted and approved in advance. Further, the recruitment of surgeons from multiple hospital sites will be necessary to perform the surgeries. Each of these sites will require approval of their independent Institutional Review Board ("IRB") to approve the studies.

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 robotic 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 of 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.

During the quarter ended September 30, 2019, the Company completed and documented the GLP procedures, and proceeded to complete the HFE studies, which included verification of production system operation with clinical experts under rigorous formal (summative) human factors evaluation under simulated robotic manipulation exercises. During the quarter, the Company's European Notified Body also completed audits of the Company's quality system procedures and related documentation for ISO Certification.

During the quarter ended December 31, 2019, the Company completed two of its three intended fourth quarter milestones including: (i) receipt of a final independent report 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, and (ii) complete User Manual for robotic system setup by operating room staff and surgeon operation of the surgeon workstation, patient cart, instruments and accessories. The third milestone, receipt of ISO 13485 Certification, expected to be received by year-end 2019, was delayed in processing and was received January 24, 2020.

The future success of the Company is substantially dependent on the Company's ability to raise equity financing to fund its research and development program and on maintaining the support of its research and development and manufacturing service providers. See "*Liquidity and Capital Resources*".

Given the uncertainty of, among other things, the Company's ability to secure required capital to fund development and operating costs in a timely manner, product development timelines, regulatory processes and requirements (such as confirmatory human studies), actual costs and development times will exceed those set forth in the Company's MD&A for the three, six and nine months ended March 31, June 30 and September 30, 2019, and in the Company's 2018 annual information form dated March 31, 2019, and an accurate estimate of the future costs of the development milestones and regulatory phases is not possible at this time.

Current Development Plan

The Company's development milestones are set forth in the table below (the "Current Development Plan").

Milestone Number	*Development Milestones*	*Estimated Cost (in US million $)*	*Schedule for Milestone Completion*	*Comments*
Milestone 1	a) Obtain final independent report 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			Completed
	b) Complete User Manual for robotic system setup by operating room staff and surgeon operation of surgeon workstation, patient cart, instruments and accessories		Q4 2019	Completed
	c) Obtain ISO 13485 Certification[1]			Completed Q1 - 2020
Milestone 2	a) Perform additional software development and test system performance			
	b) Implement and test improvements to instruments, camera systems and accessories	TBD	TBD	
	c) Perform biocompatibility testing of instruments, camera systems and accessories at independent lab			
	d) Perform electrical safety testing for surgeon workstations and patient cart, including electromagnetic compatibility (EMC) and electromagnetic interference (EMI) tests at independent lab			
	e) Update application for IDE as additional testing lab data is received and continue preparations for human confirmatory studies			

(1) The March Prospectus disclosed that obtaining ISO 13485 Certification was expected to occur in the third quarter of 2019; receipt of the certification was received January 24, 2020.

Milestone Number	*Development Milestones*	*Estimated Cost (in US million $)*	*Schedule for Milestone Completion*	*Comments*
Milestone 3	a) Launch rebranded product line, including logos with trademark pending, literature and presentation templates, product and packaging labeling, and new website	TBD	TBD	
	b) Complete system software validation			
	c) Submit IDE application to FDA(2)			
Milestone 4	a) Receive IDE approval from FDA(3)			
	b) Receive approvals from IRB Committees of IDE hospitals	TBD	TBD	
	c) Commence human confirmatory studies under IDE protocols for FDA submittal			
Milestone 5	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	TBD	TBD	
	d) Ongoing software development and implementation			
	e) Planning and preparation for manufacturing and commercialization			
Milestone 6	a) Planning and preparation for commercialization	TBD	TBD	

Due to the ongoing limited availability of capital resources the Company has been unable to fund its planned pace of product development which has indefinitely moved out the projected date and will add to the estimated costs for the Company's submission of its 510(k) application. The Company has withdrawn the projections for achievement of all development milestones beyond Milestone 1, including their timing and cost.

(2) Due to the ongoing limited availability of capital resources as well as the necessary product changes identified, the Company has not yet submitted its IDE application to the FDA. In addition, the Company has been unable to fund planned software development, verification and validation or complete the necessary product development, testing and documentation needed to meet regulatory requirements for an IDE application to the FDA. The Company has withdrawn the projections for achievement of all development milestones beyond Milestone 1, including their timing and cost until such time as the capital resources become available to resume these activities.

(3) The Company has withdrawn the projections for achievement of all development milestones beyond Milestone 1, including their timing and cost.

The details above with respect to Milestones 2, 3, 4, 5 and 6 reflect the Company's current plans with respect to the development steps for its robotic surgical system. At this time, the Company is unable to provide any forecast of timing or cost estimate in respect of the milestones, and, concurrently with the filing of its short form prospectus on October 15, 2019 in connection with the October Offering, the Company had issued a press release withdrawing all prior forecasts and estimates.

While the Company is assessing the availability of sufficient financing, it has taken temporary measures to reduce its cash burn over its historical rates, including the suspension of product development, staff reduction, sourcing more cost-effective resources and reducing its general and administrative overhead where possible.

During the third quarter of 2019, the Company completed the animal studies and the human factors evaluation studies originally planned for completion during the second quarter of 2019. However, data from the animal studies and human factors studies was delayed, followed by delays in receiving documentation required from third parties. In addition, the animal studies and human factors studies have identified additional product enhancements that the Company intends to implement before proceeding to human use, related to software, instrumentation and camera development. The implementation of product enhancements and the production of documentation for the Company's IDE application are paced by the availability of capital resources, which are currently insufficient to complete the work. As a result of these factors, the timing for submission of the IDE application to the FDA (Milestone 3) cannot be predicted at this time. Audits for ISO13485 were completed as planned during the third quarter. The issuance of the ISO13485 certificate was expected to occur during the fourth quarter (Milestone 1) but was actually received January 24, 2020.

The table below sets out certain details comparing the Company's previous development plan and expected costs as disclosed in the Company's March 2019 Prospectus against actual costs incurred in 2019:

Development milestone as disclosed in March 2019 Prospectus	***Estimated cost (in US $ million) as disclosed in March 2019 Prospectus (A)***	***Development milestone – Current Plan***	***Actual Cost (B)***	***Difference between estimated cost disclosed in March 2019 Prospectus and actual cost (A-B)***	***Reasons for Cost Difference***
Milestone 4	16.0	Completed	16.1	0.63% increase	Actual costs exceeded estimated costs due to minor variances.
Document results of confidence build unit testing, implement subsystem design improvements and schedule preliminary audit of quality system by European Notified Body		Q1 2019			

Milestone 5					
Update system design and related hardware and software documentation	16.9	Completed Q2 2019	21.0	24.26% increase	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.
Verify production system operation with clinical experts under rigorous formal (summative) human factors evaluation under simulated robotic manipulation exercises		Moved to Q3 2019 and Completed			
Implement single-port robotic surgical system hardware design freeze (5)		Completed Q2 2019			
Initiate preclinical live animal (swine) and cadaver studies according to final protocols for FDA submittal (5)		Completed Q2 2019			
Submit Investigational Device Exemption (IDE) application to FDA		Moved to Current Milestone 3(c)			
Submit draft protocols to FDA in Q-submission(s) for comment		Completed Q2 2019			

Milestone 6					
Complete and document preclinical live animal (swine) and cadaver surgery studies according to final protocols for FDA submittal	16.1	Completed Q3 2019	13.1	18.63% decrease	Actual costs were less than estimated costs as not all steps were completed in the planned timeframe, with certain steps being deferred, 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		Completed Q1 2020			
Receive IDE approval from FDA		Moved to Current Milestone 4(a)			
Milestone 7					
Complete and document human confirmatory studies under IDE protocols for FDA submittal		Moved to Current Milestone 5(a)	TBD		The Company is, at this time, unable to provide any forecast of timing or cost estimate in respect of these milestones, and, concurrently with the filing of its short form prospectus on October 15, 2019 in connection with the October Offering, the Company had issued a press release withdrawing all prior forecasts and estimates.
Submit Technical File to European Notified Body for review for CE Mark		Moved to Current Milestone 5(c)			
Submit 510(k) application to FDA		Moved to Current Milestone 5(b)			

The Company had previously forecasted at June 30, 2019 that in the second half of 2019, it expected to incur total milestone-related expenses of approximately $42.3 million. The Company's actual expenses totaled approximately $22.4 million. The difference between the original and updated milestone-related costs is primarily related to scaled back operations resulting from the Company's capital shortfall. The Company has withdrawn the projections for achievement of all milestones beyond Milestone 1, including the timing and cost estimates.

Due to the nature of technology research and development and the Company's lack of sufficient capital, there is no assurance that these future 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 milestones could be identified as the development of its single-port robotic surgical system progresses, or existing milestones, budgets and the schedule for completion of each milestone may change depending on a number of factors including the results of the Company's development program, 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 and time to complete the development of the Company's single-port robotic surgical system cannot be forecast beyond 2019. Please see the section "*Forward-Looking Statements*".

Please also refer to the risk factors set forth starting on page 17 of the Company's Annual Information Form for the 2018 fiscal year, available on SEDAR at www.sedar.com.

Financings

Offerings since 2019

On March 25, 2020, the Company entered into definitive agreements with institutional investors that provide for the purchase and sale of 7,000,000 common shares of the Company (the "Common Shares") at a per share purchase price of US$0.17 per Common Share and 3,500,000 Common Share purchase warrants (each, a "Warrant"), resulting in total gross proceeds of approximately $1.2 million (approximately $0.885 million net of closing costs including cash commission described below). Each whole Warrant is exercisable to purchase one Common Share (a "Warrant Share") at an exercise price of US$0.19 per Common Share for a period of five years following the date of closing of the offering. The warrants were valued at $618,100 based on the value determined by the Black-Scholes model and the balance of $571,900 was allocated to common shares.

H.C. Wainwright & Co. ("Wainwright") acted as the exclusive placement agent for the offering. Pursuant to the placement agency agreement, in addition to the cash commission paid to Wainwright of $83,300, broker warrants were issued to Wainwright which entitle the holder to purchase 490,000 Common Shares at a price of US $0.2125 per share prior to expiry on March 25, 2025.

Titan intends to use the net proceeds from the offering for general corporate purposes including: resuming the development of its single-port robotic surgical system, instruments and accessories; funding working capital (including the reduction of outstanding payables); and capital expenditures.

From January 3, 2020 to the date of this report, the Company has raised $2,071,930 through the sale of 4,408,048 Common Shares to Aspire Capital in accordance with the terms of the Second Aspire Agreement as further described below.

On January 3, 2020, Cambridge Design Partnership Ltd. ("Cambridge") agreed to purchase from the Company 501,148 Common Shares at a price of $0.50 per share and the purchase price was satisfied by way of Cambridge setting off $250,574 owing by the Company to Cambridge for services rendered by Cambridge.

Offerings During 2019

On December 23, 2019, the Company announced that it had entered into a second Common Share Purchase Agreement ("Second Aspire Agreement") with Aspire Capital Fund, LLC ("Aspire Capital") under which Aspire Capital committed to purchase up to US $35.0 million of common shares of Titan at the Company's request from time to time, until June 23, 2022, subject to the terms and conditions of the agreement. In accordance with the terms of the Second Aspire Agreement, the Company immediately issued 973,000 Common Shares to Aspire Capital as a commitment fee (the "December Commitment Shares") upon entering into the agreement, and subsequent to the year-end, the Company has raised an additional $2,071,930 through the sale of 4,408,048 Common Shares to Aspire Capital.

Titan filed a prospectus supplement to the Company's Form F-3 shelf registration statement (File No. 333-232898), which was declared effective on December 23, 2019 by the U.S. Securities and Exchange Commission, qualifying the additional offer and sale of Common Shares to Aspire Capital (including the December Commitment Shares).

On November 1, 2019, the Company announced that it had filed and been receipted for a final short form prospectus filed in Ontario, British Columbia and Alberta in connection with the October Offering. On November 7, 2019, the Company announced that it had determined not to proceed with the October Offering.

On August 29, 2019, the Company announced that it had entered into a Common Share Purchase Agreement (the "Aspire Agreement") with Aspire Capital under which Aspire Capital committed to purchase up to US $35.0 million of common shares of Titan at the Company's request from time to time, until February 28, 2022, subject to the terms and conditions of the agreement. On commencing the Aspire Agreement, the Company immediately sold to Aspire Capital 1,777,325 Common Shares at a price of US $1.6879 per share for gross proceeds of US $3.0 million, and also issued 639,837 Common Shares to Aspire as a commitment fee (the "August Commitment Shares"). Until the Aspire Agreement was terminated on December 23, 2019 (pursuant to and upon entering into the Second Aspire Agreement described above), the Company raised a further $2,304,531 and issued an additional 5,367,282 Common Shares at an average price of $0.4294 per share.

Titan filed a prospectus supplement to the Company's Form F-3 shelf registration statement (File No. 333-232898), which was declared effective on August 2, 2019 by the U.S. Securities and Exchange Commission, qualifying the offer and sale of Common Shares to Aspire Capital (including the August Commitment Shares) pursuant to the Aspire Agreement. Northland Securities, Inc. acted as the Company's agent and financial advisor in connection with the offering and was paid a cash fee of $160,000.

On March 21, 2019, Titan completed an offering of securities made pursuant to an agency agreement ("Agency Agreement") dated March 18, 2019 between the Company and Bloom Burton Securities Inc. as agent ("Bloom Burton"). The Company sold 8,455,882 units under the offering at a price of $3.40 per unit for gross proceeds of approximately $28,750,000 ($25,426, 744 net of closing cost including cash commission of $2,012,500). Each unit consisted of one common share of the Company and one warrant, each warrant entitling the holder thereof to acquire one common share at an exercise price of $4.00 and expiring March 21, 2024. The warrants were valued at $15,897,059 based on the value determined by the Black-Scholes model and the balance of $12,852,941 was allocated to the common shares.

Pursuant to the Agency Agreement, in addition to the cash commission paid to Bloom Burton, broker warrants were issued to Bloom Burton which entitle the holder to purchase 591,911 common shares at a price of $3.40 per share prior to expiry on March 21, 2021. The broker warrants were valued using the Black-Sholes model and the value of $864,190 was accounted for as an increase in the closing costs and allocated between the shares and the warrants.

During the three months ended March 31, 2019, 1,018,506 warrants were exercised for total proceeds of $3,259,219. The fair value of the exercised warrants was $3,742,824 which was reclassed from warrant liability to common shares.

Off-Balance Sheet Arrangements

As of the date of this report, the Company had no off-balance sheet arrangements.

Outstanding Share Data

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

Type of Securities	Number of Common Shares issued or issuable upon conversion
Common Shares(1)	51,816,877
Stock options(2)	1,740,186
Warrants	24,703,411
Broker warrants(3)	1,709,276

Notes:

(1) Refer to details of the offerings in the previous section of this document.

(2) The Company has outstanding options enabling certain employees, directors, officers and consultants to purchase common shares. Please refer to note 7(b) of the Financial Statements for the years ended December 31, 2019 and 2018 for terms of such options.

- Includes 25,765 stock options issued January 2020 with an exercise price of CDN $0.657 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years.

(3) A total of 1,219,276 broker warrants were issued in connection with the April 2018, August 2018 and March 2019 offerings. As of the date hereof, 1,219,276 broker warrants remain outstanding. Details include the following:

- Pursuant to the agency agreement in respect of the April 2018 offering, in addition to the cash commission paid to the agents, 89,795 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one common share at the price of CDN $9.00 for a period of 24 months following the closing date.

- Pursuant to the agency agreement in respect of the August 2018 offering, in addition to the cash commission paid to the agents, 537,570 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one common share at the price of US $2.50 for a period of 24 months following the closing date.

- Pursuant to the agency agreement in respect of the March 2019 offering, in addition to the cash commission paid to the agents, 591,911 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one common share at the price of US $3.40 for a period of 24 months following the closing date.

Accounting Policies

The accounting policies set out in the notes to the audited financial statements have been applied in preparing the audited financial statements for the year ended December 31, 2019 including the comparative information presented in the audited financial statements for the year ended December 31, 2018.

These financial statements have been prepared in accordance with accounting principles applicable to going concern, which contemplates that the Company will be able to realize its assets and settle its liabilities in the normal course as they come due during the normal course of operations for the foreseeable future. The Company has shareholders' deficiency of $214,844,773 and current year losses of $41,907,079. 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.

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of provisions at the date of the financial statements and the reported amount of expenses during the period. Financial statement items subject to significant judgement include, (a) the measurement of stock-based compensation and (b) the fair value estimate of the initial and subsequent measurement of warrant liabilities. While management believes that the estimates and assumptions are reasonable, actual results may differ.

(a) Stock Options

The Black-Scholes model used by the Company to determine fair values of stock options and warrants was developed for use in estimating the fair value of the stock options and warrants. This model requires the input of highly subjective assumptions including future stock price volatility and expected time until exercise. Changes in the subjective input assumptions can materially affect the fair value estimate.

(b) Warrant Liability

In accordance with IAS 32, since the exercise price of certain of the Company's warrants are not a fixed amount, as they are a) denominated in a currency (Canadian dollar) other than the Company's functional currency (U.S. dollar), or, b) as with the warrants issued August 10, 2018 and March 21, 2019, have a cashless exercise option, the warrants are accounted for as a derivative financial liability. The warrant liability is initially measured at fair value and subsequent changes in fair value are recorded through net and comprehensive loss for the period. The accounting guidance for fair value measurements prioritizes the inputs used in measuring fair value into the following hierarchy:

Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 – Inputs other than quoted prices included within Level 1 that are directly or indirectly observable;

Level 3 – Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

The fair value of the Company's warrant liability is initially based on level 2 (significant observable inputs) and at December 31, 2019 is based on level 1, quoted prices (unadjusted) in an active market, for the Company's listed warrants and level 2 for the Company's unlisted warrants.

Related Party Transactions

During the year ended December 31, 2019, transactions between the Company and directors, officers and other related parties were related to compensation matters in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

Financial Instruments

The Company's financial instruments consist of cash and cash equivalents, amounts receivable, accounts payable and accrued liabilities and warrant liability. The fair value of these financial instruments approximates their carrying values, unless otherwise noted, due to the short-term maturities of these instruments or the discount rate applied.

Events Subsequent to the year Ended December 31, 2019

Since December 31, 2019, the outbreak of the novel strain of coronavirus, specifically identified as "COVID-19", has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and social distancing, have caused material disruption to business globally resulting in an economic slowdown. Global equity markets have experienced significant volatility and weakness. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The duration and impact of the COVID-19 outbreak is unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on the financial results and condition of the Company in future periods.

On January 28, 2020, the Company issued 25,765 stock options with an exercise price of CDN $0.657 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years.

See also the section "*Financings – Offerings since 2019*".

Outlook

During the year ended December 31, 2019, the Company was unsuccessful in securing sufficient capital to maintain product development and regulatory activities at a pace that would allow accomplishment of its previously stated milestones. As a result, on October 15, 2019, the Company announced that it had withdrawn all forward-looking statements included in its continuous disclosure documents with respect to the cost and timing of the development of its robotic surgical system beyond the fourth quarter of 2019. On November 7, 2019, the Company announced that it had determined not to proceed with the October Offering.

The Company does not have sufficient capital to continue the development of its robotic surgical system and there can be no assurance that the Company will be successful in securing additional financing. The Company is currently pursuing additional financing as its top priority. Any further development of the Company's robotic surgical system is entirely contingent on the availability of such financing and, accordingly, any future development of the Company's robotic surgical system cannot be predicted at this time. The Company's Primary Supplier has ceased all work on the development of the Company's robotic surgical system and its Service Provider has initiated a Civil Claim against the Company. The Company has taken certain measures to reduce its cash burn over its historical rates, including a significant reduction in its rate of development, sourcing more cost-effective resources and reducing its general and administrative overhead where possible.

Following the above noted adverse events during second half of 2019, the Company's Board of Directors established a special committee of independent directors to oversee the global search for strategic alternative transactions to maximize shareholder value. The mandate of the special committee includes a wide range of potential transactions, including financing through equity or debt, licensing, merger or acquisition. There can be no assurance that the Company will be successful in securing additional capital or identifying a suitable strategic alternative transaction. In the event that the Company is unable to secure additional capital or conclude a suitable strategic alternative transaction, it may be unable to pay down past due invoices or resume and continue its product development. It is also possible that in such circumstances its relationships with key service providers may further deteriorate. As a result of these factors, the schedule for completion of the Company's stated milestones cannot be predicted at this time.

Additional information relating to the Company, including Titan's Annual Information Form for the 2019 fiscal year, is available on SEDAR at www.sedar.com.

TITAN MEDICAL INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE YEAR ENDED DECEMBER 31, 2018

(IN UNITED STATES DOLLARS)

This Management's Discussion and Analysis ("MD&A") was dated February 13, 2019 and has been updated to include risks and subsequent events to March 30, 2020.

This MD&A provides a review of the performance of Titan Medical Inc. ("Titan" or the "Company") and should be read in conjunction with its audited financial statements for the year ended December 31, 2018 (and the notes thereto) (the "Financial Statements"). The Financial Statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"). All financial figures are in United States Dollars except where otherwise noted.

Internal Control over Financial Reporting

During the year ended December 31, 2018, no changes were made to the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Forward-Looking Statements

This discussion includes certain statements that may be deemed "forward-looking statements". All statements in this discussion other than statements of historical facts that address future events, developments or transactions that the Company expects, are forward-looking statements. These forward-looking statements are made as of the date of this MD&A. Forward-looking statements are frequently, but not always, identified by words such as "expects", "expected", "expectation", "anticipates", "believes", "intends", "estimates", "predicts", "potential", "targeted", "plans", "possible", "milestones", "objectives" and similar expressions, or statements that events, conditions or results "will", "may", "could", or "should" occur or be achieved. Forward-looking statements that appear in this MD&A include:

- the Company is committed to developing its robotic surgical system with the objective of substantially improving upon minimally invasive surgery;
- the Company intends to initially pursue focused surgical indications for the SPORT Surgical System, which may include one or more of gynecologic, urologic, colorectal or general abdominal procedures;
- the SPORT Surgical System is being developed with the goal of inserting the interactive multi-articulating instruments and the 3D high definition vision system into the patient's body cavity through a single incision;
- the Company's technology and research and development objectives and milestones, including such development milestones as achieving design freeze, 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 and human cadaver studies;
- the Company's expectation that it can in a timely manner produce the appropriate preclinical and clinical data required for a 510(k) application to the U.S. Food and Drug Administration, and Technical File for the CE Mark;
- the Company's expectation with respect to launching a commercial product in certain jurisdictions;
- the Company's intentions to develop a robust training curriculum and post-training assessment tools;
- the Company's plans to develop and commercialize the SPORT Surgical System and the estimated incremental costs (including the status, cost and timing of achieving the development milestones disclosed herein);
- the Company's plans to design, create and refine software for production system functionality of the SPORT Surgical System and the estimated incremental costs (including the status, cost and timing of achieving the development milestones disclosed herein);
- the Company's intentions to complete formative and summative human factors studies;
- the Company's belief that existing and planned prototype units will be suitable to support human factors studies, preclinical evaluation and activities related to securing confirmatory human data during 2019;
- the Company's intentions with respect to initiating marketing activities following receipt of the applicable regulatory approvals;
- the Company's intention to continue to assess specialized skill and knowledge requirements and recruitment of qualified personnel and partners;
- the Company's belief that the materials and parts necessary for the manufacture of a clinical-grade SPORT Surgical System will be available in the marketplace;
- the Company's 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 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 Company's projected competitive conditions with respect to its products;
- the Company's technology and research and development objectives, including such development milestones as completing the engineering confidence build and achieving design freeze, estimated costs, schedules for completion and probability of success;

- the Company continues to explore in-licensing opportunities for technologies that may be used in conjunction with the Company's robotic surgical system;

- the Company anticipates that it will continue its pursuit of key strategic relationships;

- the Company's continuing efforts to secure its intellectual property and expanding its patent portfolio by filing patent applications as it progresses in the development of robotic surgical technologies and by licensing suitable technologies;

- the Company's plan to focus on the development and commercialization of the SPORT Surgical System at estimated incremental costs and according to a given timeline; and

- the Company intends to utilize a direct sales force and/or distribution partner(s) to initiate marketing the SPORT Surgical System to hospitals.

Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are no guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Forward-looking statements are statements about the future and are inherently uncertain, and actual results of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, such as current global financial conditions, dependence on key personnel, conflicts of interest, dependency on additional financing, the Company's history of losses, reliance on strategic alliances, the ability to retain key personnel in a highly-competitive employment environment, the possibility of the Company's inability to augment its management team when required, the possibility that the Company's trade secrets and confidential information may be compromised, reliance on third parties for important aspects of the Company's business, uncertainty as to product development and commercialization milestones, results of operations, competition, technological advancements, rapidly changing markets, uncertain market for the Company's products and technology, uncertainty as to the enforceability of the Company's intellectual property, infringement of intellectual property rights of others, scope and cost of insurance and uninsured risks, risks associated with the Company entering into additional long-term contractual arrangements, ability to license other intellectual property rights, government regulation, changes in market conditions and demands and preferences, changes in government policy, exposure to product liability claims, changes in accounting and tax rules, regulatory inquiries, requirements and approvals, contingent liabilities, manufacturing and product defects, history of losses, stock price volatility, future share sales, limited operating history, fluctuating financial results and currency fluctuations, uncertainty as to the Company's ability to meet its development and commercialization milestones, uncertainties as to development and manufacturing of a commercially viable product, reliance on external suppliers and development firms, fluctuations in the market prices of the Company's securities, possible future sales by the Company's shareholders of their securities, limited operating history of the Company, the development stage of the Company and its lack of revenues or earnings, fluctuations of the Company's financial results, the possibility that the Company is not able to maintain its "foreign private issuer" status, the possibility of delisting from the Nasdaq or TSX exchanges, the negative impact of COVID-19 on the ability of suppliers of goods and services to provide resources in a timely manner to support the Company's milestones, the negative impact of COVID-19 on present and future demand for robotic surgeries, equipment and supplies, and the negative impact of COVID-19 on the ability of the Company to obtain regulatory approvals as required on a timely basis to accomplish its milestones and objectives.

Please also refer to the risk factors set forth starting on page 16 of the Company's Annual Information Form for the 2017 fiscal year, available on SEDAR at www.sedar.com, which are expressly incorporated by reference into the MD&A.

There may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. Other than as specifically required by law, the Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made, or to reflect the occurrence of unanticipated events, whether as a result of new information, future events or results or otherwise. Investors are cautioned that any such statements are not guarantees of future performance and that actual results or developments may differ materially from those projected in the forward-looking statements. Accordingly, investors should not place undue reliance on forward-looking statements.

History and Business

The Company is the successor corporation formed pursuant to two separate amalgamations under the *Business Corporations Act* (Ontario) on July 28, 2008. Titan does not have any subsidiaries.

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

Overall Performance

During the year ended December 31, 2018 the Company raised gross proceeds of $28,424,732 ($25,776,269 net of closing cost including cash commission of $1,983,429). The Company generated a net los of $22,639,272, which included research and development expenditures of $32,858,339 and a gain on the change in fair value of warrants of $17,095,220.

The Company's business is focused on research and development through to the commercialization of computer-assisted robotic surgical technologies for application in minimally invasive surgery ("MIS"). The Company is developing the SPORT Surgical System, a single- port robotic surgical system 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 focused surgical indications for the SPORT Surgical System, which may include one or more of gynecologic, urologic, colorectal or general abdominal procedures.

Development of the SPORT Surgical System has proceeded with input from surgeons and operating room staff experienced in minimally invasive surgery and, 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. Overall, the surgical system is designed to be adapted to the needs of the surgeon, with the intent that the system will appeal to a broader array of surgeons than systems that do not provide such adjustability.

The SPORT Surgical System patient cart is being developed to deliver interactive multi- articulating instruments and a 3D high definition vision system into a patient's abdominal body cavity through a single access port. The design of the patient cart includes an insertion tube of approximately 25 millimeter (mm) diameter. The insertion tube includes an integrated 2D wide- angle camera module that once inserted, provides visualization for optimal positioning of the camera insertion tube by the bedside assistant under the guidance of the surgeon. Once the camera insertion tube is inserted and positioned in the body, a separate steerable, 3D high definition endoscopic camera is configured to deploy into a working configuration wherein the camera module and multi-articulating instruments can be controlled by a surgeon via the workstation. The reusable multi-articulating, snake-like instruments are designed to couple with sterile detachable single patient use robotic end effectors that would provide first use quality in every case and eliminate the reprocessing of the complete instrument. The use of reusable (for a specific number of uses) robotic instruments 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 surgical centers, where applicable.

As part of the development of the SPORT 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 SPORT Surgical System 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 SPORT Surgical System.

The Company continuously evaluates its technologies under development for intellectual property protection through a combination of trade secrets and patent application filings. As of December 31, 2018, the Company had ownership of 29 patents and 73 patent applications. The Company has accelerated 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 29 issued patents as of December 31, 2018. 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 and commercialization efforts, the Company has established certain milestones that it uses to assess its progress towards developing commercially viable robotic surgical technologies. These milestones relate to technology and design advancements as well as to targeted dates for 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 commercialization schedule could be delayed and potential purchasers of its initial commercial systems may decline to purchase them or may choose to purchase alternative technologies.

Among other things, the future success of the Company is substantially dependent on continuing its research and development program, including the ongoing support of any outsourced research and development suppliers.

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, commercially viable, manufacturable product, or one that is approved by regulatory authorities.

Previously, for the year ended 2017, the Company achieved all of its milestones as published in the Company's Annual Information Form for the 2017 fiscal year. The Company continued this trend of accomplishment through the year ended 2018, again completing all of its published milestones: (1) planning of software development and product upgrades including improvements to the workstation, patient cart, instruments, camera, light source and disposable components; (2) demonstration of the first two modules of its simulation software; (3) prototyping, testing and procurement of surgeon feedback on revised workstation controls; (4) completion of software and hardware change requirements and finalization of computer and software architecture for production systems; (5) completion of revisions to instrument and lens wash system and demonstration of performance; (6) completion of a camera insertion tube engineering confidence build based on an improved design; (7) completion of the design of the SPORT Surgical System workstation and patient cart for engineering confidence build; (8) completion and demonstration of a full suite of simulation software for beta test; and (9) completion of the SPORT Surgical System capital equipment engineering confidence build based on the improved design requirements.

As previously announced, the Company selected three Centers of Excellence (strategic facilities) for preclinical studies in the U.S. and Europe, which are:

- 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 SPORT 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 the SPORT 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.

To date, 12 experienced robotic surgeons from three continents have performed 43 live animal studies and two 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 presentated at clinical education meetings, including:

1. **Multi-disciplinary applications of a new robotic platform** by Barbara Seeliger, MD and Lee Swanstrom, MD (IHU Strasbourg), accepted and presented as a poster at the Society of American Gastrointestinal and Endoscopic Surgeons Meeting, Seattle, WA. (April 2018);

2. **Single-port prostatectomy using SPORT Surgical System** by Eric Barret, MD (Institut Mutualiste Montsouris, France), accepted and presented as a poster at the EAU Section of Urology Technology Meeting, Modena, Italy, May 2018;

3. **Multispecialty single port robotic technology applied in the live animal model: proof of concept** by Travis Rogers, MD, Eduardo Parra Davila, MD, Vipul Patel, MD (all from Florida Hospital), Ricardo Estape, MD (South Miami GOG) and Armando Melani, MD (IRCAD Brazil), accepted and presented as a poster at the Society of Robotic Surgery Meeting, Stockholm, Sweden (June 2018);

4. **Feasibility of single-port partial nephrectomy using SPORT surgical system** by Eric Barret, MD (Institut Mutualiste Montsouris, France), accepted and presented as a poster at Society of Robotic Surgery Meeting, Stockholm, Sweden (June 2018);

5. **Single-port robotic partial and hemi nephrectomy using a novel single port robotic platform** by Sebastien Crouzet, MD (University of Lyon, France) and Barbara Seeliger, MD (IHU Strasbourg), accepted and presented at EAU Robotic Urology Section Meeting, Marseille, France (September 2018);

6. **Reverse Objective Structured Assessment of Technical Skills (Reverse-OSATS) as a means of measuring the capability of the Titan Medical SPORT Surgical System on core surgical principles** by Chetna Arora, MD, Arnold P. Advincula, MD (both from Columbia University Medical Center) and William B. Burke, MD (Stony Brook Cancer Center), accepted and presented at Society of European Robotic Gynecologic Surgeons Meeting, Milan, Italy (September 2018);

7. **Multispecialty single port robotic technology applied in the live animal model: proof of concept** by Travis Rogers, MD, Eduardo Parra Davila, MD, Vipul Patel, MD (all from Florida Hospital), Ricardo Estape, MD (South Miami GOG) and Armando Melani, MD (IRCAD Brazil), accepted and presented at World Congress of Endourology Meeting, Paris, France (September 2018);

8. **Feasibility of single-port partial nephrectomy using SPORT surgical system** by Eric Barret, MD (Institut Mutualiste Montsouris, France) Accepted and presented at World Congress of Endourology Meeting, Paris, France, September 2018; and

9. **Reverse Objective Structured Assessment of Technical Skills (Reverse-OSATS) as a means of measuring the capability of the Titan Medical SPORT Surgical System on core surgical principles** by Chetna Arora, MD, Arnold P. Advincula, MD (both from

Columbia University Medical Center) and William B. Burke, MD (Stony Brook Cancer Center), accepted at American Association of Gynecologic Laparoscopists World Congress, Las Vegas, NV (November 2018).

Further, several of these surgeons collaborated to author a manuscript that was published January 2019 in the highly-regarded, peer-reviewed journal *Surgical Endoscopy*: and is titled **Enabling single-site laparoscopy: the SPORT platform** by Barbara Seeliger[1] ● Michele Diana[1] ● Jelle P. Ruurda[2] ● Konstantinos M. Konstantinidis[3] ● Jacques Marescaux[1] ● Lee L. Swanström[1,4]

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4 Division of GI/MIS, The Oregon Clinic, Portland, OR, USA

Selected Annual Information

The following table summarizes selected financial data reported by the Company for the years ended December 31, 2018, 2017 and 2016 in accordance with IFRS. The information set forth should be read in conjunction with the respective audited financial statements.

	2018	2017	2016
Net Sales	-	-	-
Net and comprehensive loss for the year	$22,639,272	$33,586,984	$23,323,496
Basic & diluted loss per share	$1.36	$4.25	$4.80
Total long-term liabilities	-	-	-
Total Assets	$21,915,164	$29,674,610	$7,192,496
Dividends	-	-	-

Significant changes in key financial data from 2016 to 2018 can be attributed to the availability of equity financing, the fluctuations of the fair value of warrants and expenditures in connection with the development of the Company's robotic surgical system.

Discussion of Operations

The Company incurred a net and comprehensive loss of $22,639,272 during the year ended December 31, 2018, compared with a net and comprehensive loss of $33,586,984 for the year ended December 31, 2017. This decrease in net and comprehensive loss for the year is primarily attributed to a large gain from the change in fair value of warrants in 2018 compared to a loss in 2017, which was partially offset by substantially higher research and development expenditures in 2018 compared to 2017. In addition, foreign exchange gain in the year ended December 31, 2018, was $979,894, compared to a loss of $542,664 for the year ended December 31, 2017. This change

in foreign exchange of $1,522,558 is primarily attributable to the foreign exchange on warrants, a gain of $984,462 in 2018 compared to a loss of $305,475 in 2017.

During the year ended December 31, 2018, the Company continued to support strategic product development and manufacturing relationships with qualified subcontractors, carrying on efforts to globally secure the Company's intellectual property through the patent and licensing process, and continue the development of the Company's robotic surgical system.

Research and development expenditures (all of which were expensed in the period), for the years ended December 31, 2018 and December 31, 2017, respectively, were as follows:

Research and Development Expenditures	**Year Ended December 31, 2018**	**Year Ended December 31, 2017**
Intellectual property development License and royalties	$ 14,540	$ 25,704
Product development	-	43,575
	32,843,799	12,831,576
Total	$32,858,339	$12,900,855

Research and development expenditures increased in the year ended December 31, 2018 compared to the same period in 2017. This increase was primarily due to an increase in available funding in 2018 that allowed the Company to accelerate product development in 2018, compared to 2017.

Excluding foreign exchange, general and administrative expenses for the year ended December 31, 2018, were $6,832,003 compared to $5,983,201. The increases in general and administrative expenses during the comparative periods are attributed to increases in insurance, consulting fees, incremental salaries of personnel added after the beginning of 2017, management and administrative salaries, professional fees and office and general expenses.

The gain attributed to the change in fair value of warrants for the year ended December 31, 2018 was $17,095,220 compared to loss of $13,133,671 for the same period in 2017. The change of $30,228,891 reflects a significant decrease in the fair value of warrants in 2018 compared to 2017.

The Company realized $288,300 of interest income on its cash and cash-equivalent balances during the year ended December 31, 2018, and $17,442 for the same period in 2017. This increase in interest income is primarily attributed to substantially higher cash balances in its money market account in 2018 compared to 2017.

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

Summary of Quarterly Results

The following is selected financial data for each of the eight most recently completed quarters, derived from the Company's financial statements and calculated in accordance with IFRS. Basic

and diluted loss per share figures are calculated on the basis of the 30:1 consolidation of common shares.

	Three Months Ended December 31, 2018	Three Months Ended September 30, 2018	Three Months Ended June 30, 2018	Three Months Ended March 31, 2018	Three Months Ended December 31, 2017	Three Months Ended September 30, 2017	Three Months Ended June 30, 2017	Three Months Ended March 31, 2017
Net sales	-	-	-	-	-	-	-	-
Net and Comprehensive Loss (gain) from operations	$8,410,702	$7,534,456	$5,885,415	$808,699	$12,829,980	$13,902,817	$1,865,913	$4,988,274
Basic and diluted loss per share	$0.41	$0.41	$0.47	$0.07	$1.20	$1.80	$0.30	$0.90

Significant changes in key financial data from the three months ended March 31, 2017 through the three months ended December 31, 2018 reflect the ongoing development of the SPORT Surgical System. Also included is the requirement to revalue the Company's warrant liability at fair value, with subsequent changes recorded through net and comprehensive loss for the period.

During the fourth quarter of 2018, the Company had a net and comprehensive loss of $8,410,702 compared to a loss of $12,829,980 for the same period in 2017. This decrease in loss of $4,419,278 is primarily attributed to a gain in the change in fair value of warrants in 2018 of $7,166,276 compared to a loss of $7,407,114 in 2017, which was offset by substantially higher research and development expenditures in 2018 of $14,194,003 compared to $3,188,783 in 2017.

Liquidity and Capital Resources

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. The Company expects that approximately US $45 million in incremental funding is needed, for the next 12 months to maintain its currently anticipated pace of development. If additional funding is not available, the pace of the Company's product development plan may be reduced. 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. However, based on internal forecasts, Management believes that the Company has sufficient funds to meet its obligations under a reduced development plan, if necessary, for the ensuing twelve months.

The ability of the Company to arrange such financing in the future will depend in part upon prevailing capital market conditions and the business success of the Company. There can be no assurance that the Company will be successful in its efforts to arrange additional financing on terms satisfactory to the Company. If adequate funds are not available, or are not available on acceptable terms, the Company may not be able to take advantage of opportunities, or otherwise to continue its technology development program at its current pace. 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, or loss of their investment.

The Company had $11,471,243 of cash and cash equivalents on hand and accounts payable and accrued liabilities of $6,447,888 excluding warrant liability, at December 31, 2018, compared to $26,130,493 and $2,218,352 respectively, at December 31, 2017. The Company's working capital as at December 31, 2018 was $14,294,791 excluding warrant liability, compared to $26,675,319 at December 31, 2017.

Below is a table that sets out the various series of Titan warrants that were previously issued, using historic rates. The disclosure of the potential proceeds in the last column of the table below assumes all warrants are exercised on or before the expiry date. However, there is no assurance that any warrants will be exercised prior to their expiry. The chart has been updated to reflect the number of warrants issued and outstanding post 30:1 consolidation, as at June 30, 2018.

	Issue Date	Expiry Date	Number Issued	Number Outstanding	Exercise Price (CDN $)
TMD.WT.F	November 16, 2015	November 16, 2020	233,740	233,740	$48.00
TMD.WT.G	February 12, 2016	February 12, 2021	389,027	386,694	$30.00
TMD.WT.G	February 23, 2016	February 12, 2021	58,226	58,226	$30.00
TMD.WT.H	March 31, 2016	March 31, 2021	501,831	501,831	$36.00
TMD.WT.H	April 14, 2016	March 31, 2021	75,275	75,275	$36.00
TMD.WT.I	September 20, 2016	September 20, 2021	569,444	569,444	$22.50
TMD.WT.I	October 27, 2016	September 20, 2021	67,667	67,667	$22.50
NOT LISTED	March 16, 2017	March 16, 2019	357,787	135,824	$12.00
NOT LISTED	March 16, 2017	March 16, 2021	357,787	355,253	$15.00
NOT LISTED	June 29, 2017	June 29, 2022	1,612,955	75,810	$6.00
NOT LISTED	July 21, 2017	June 29, 2022	370,567	370,567	$6.00
NOT LISTED	August 24, 2017	August 24, 2022	563,067	563,067	$6.00
NOT LISTED	December 5, 2017	December 5, 2022	1,533,333	1,533,333	$18.00
NOT LISTED	April 10, 2018	April 10, 2023	1,126,665	1,126,665	$10.50
NOT LISTED	May 10, 2018	April 10, 2023	168,889	168,889	$10.50
*NOT LISTED	August 10, 2018	August 10, 2023	7,679,574	7,679,574	$4.15
TOTAL			15,665,834	13,901,859	

*The exercise price of the August 10, 2018 warrants is US $3.20. For conformity, because the other warrants in this table are in CDN dollars, the exercise price and potential proceeds in respect of the August 10, 2018 warrants have been converted to CDN dollars using the Bank of Canada rate on August 3, 2018 of US $1.00 = CDN $1.2983.

Commitments

As part of its program of research and development around the SPORT Surgical System, the Company has outsourced certain aspects of the design and development to a U.S based technology and development company. At December 31, 2018, $12,756,962 in purchase orders remain

outstanding. The Company also has on deposit with the same U.S supplier $8,541,630 to be applied against future invoices.

Development Objectives

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

The results achieved by surgeons in operating prototypes in animal and cadaver studies during 2017 validated the potential for single incision surgeries to be performed with the SPORT Surgical System. However, the studies also confirmed that improvements to the system would be necessary before proceeding toward regulatory clearance and commercialization. Accordingly, product development was accelerated in 2018 in preparation for commercial manufacturing, including hardware and software development at all levels, involving the workstation, patient cart, cameras and light source, instruments, and disposable components that facilitate successful surgery. Product improvements were completed and implemented in a capital equipment engineering confidence build of an improved prototype in December of 2018 and are expected to be followed by system performance evaluation in early 2019.

Initial product development, including software integration, will be completed before design freeze and proceeding with summative evaluation usability tests with the final product and validation studies required for supporting regulatory filings. Based on the scope of product development ahead, the Company expects these tests and studies to take place in 2019, with the system in its final configuration and with training programs in place for new surgeon users.

During 2018, the Company confirmed with the Food and Drug Administration of the United States Department of Health and Human Services (the "FDA"), that confirmatory human data will be required for its planned regulatory submission. The performance of human surgeries with the SPORT 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 will be necessary to perform the surgeries. Each of these sites will require approval of their independent Institutional Review Board ("IRB") to approve the studies. During the first three quarters of 2019, the Company plans to pursue the recruitment of surgeons and hospitals for the studies, IDE approval by the FDA, and approvals by the IRB of each hospital, in preparation for the confirmatory human studies planned for completion during the fourth quarter.

A complete estimate of the timing and costs for development milestones beyond 2019 is speculative. The Company estimates that a minimum of US $64.1 million will be required to fund its operations in 2019. Based on the cash and cash equivalents on hand, including deposits with suppliers as at December 31, 2018, the Company believes that it will need to raise approximately $45 million to fund it operations in 2019. This includes projected capital resources necessary for the Company to submit its 510(k) application to the FDA and apply for CE Marking which indicates that a product for sale within the European Economic Area (EEA) has been assessed to conform with health safety and environmental protection requirements. If successful with those efforts, the Company expects to proceed with early commercialization activities in the U.S. in 2020. Given the uncertainty of, among other things, product development timelines, regulatory processes and requirements (such as live animal and human cadaver studies and confirmatory human studies), as well as the availability of required capital to fund development and 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 2019 is not possible at this time.

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

Current Development Plan

The Company anticipates development costs through to the fourth quarter of 2019 to be as set out in the table below (the "Current Development Plan").

Milestone Number	*Development Milestones*	*Estimated Cost (in U.S. million $)*	*Schedule for Milestone Completion*	*Comments*
Milestone 1	Prototype, test and procure surgeon feedback on revised workstation controls Complete software and hardware change requirements and finalize computer and software architecture for production systems Complete revisions to instrument and lens wash system and demonstrate performance		Q2 2018	*Completed*
Milestone 2	Complete Camera Insertion Tube (CIT) engineering confidence build based on improved design Complete design of SPORT Surgical System surgeon workstation and patient cart for engineering confidence build Complete and demonstrate full suite of simulation software for beta test		Q3 2018	*Completed*
Milestone 3	Complete SPORT Surgical System capital equipment engineering confidence build based on improved design		Q4 2018	Completed
Milestone 4	Document results of confidence build unit testing, implement subsystem design improvements and schedule preliminary audit of quality system by European Notified Body	16.0(1)	Q1 2019	
Milestone 5	Update system design and related hardware and software documentation Verify production system operation with clinical experts under rigorous formal (summative) human factors evaluation under simulated robotic manipulation exercises Initiate SPORT Surgical System Design Freeze Initiate preclinical live animal (swine) and cadaver studies according to final protocols for FDA submittal Submit Investigational Device Exemption (IDE) application to FDA	16.9(2)	Q2 2019	
	Submit draft protocols to FDA in Q-submission(s) for comment			*Completed*

Milestone Number	*Development Milestones*	*Estimated Cost (in U.S. million $)*	*Schedule for Milestone Completion*	*Comments*
Milestone 6	Complete and document preclinical live animal (swine) and cadaver studies according to final protocols for FDA submittal Obtain ISO 13485 Certification Receive IDE approval from FDA	16.1(3)	Q3 2019 –	
Milestone 7	Complete and document human confirmatory studies under IDE protocols for FDA submittal Submit Technical File to European Notified Body for review for CE Mark Submit 510(k) application to FDA	15.1(4)	Q4 2019	
	TOTAL	64.1		

Notes:

(1) Includes research and development costs estimated at approximately US $14.6 million, and general and administrative costs estimated at approximately US $1.4 million.
(2) Includes research and development costs estimated at approximately US $15.5 million, and general and administrative costs estimated at approximately US $1.4 million.
(3) Includes research and development costs estimated at approximately US $14.7 million, and general and administrative costs estimated at approximately US $1.4 million.
(4) Includes research and development costs estimated at approximately US $13.7 million, and general and administrative costs estimated at approximately US $1.4 million.

Upon completion of the development of the SPORT Surgical System and following receipt of applicable regulatory clearance in the United States, the Company intends to utilize a direct sales force and to initiate marketing of the SPORT Surgical System to hospitals.

Due to the nature of technology research and development, there is no assurance that these objectives will be achieved, and there can be no assurance with respect to the time or resources that may be required. The Company expects that additional specific milestones could be identified as the development of its SPORT Surgical System progresses, or existing milestones, budgets and the schedule for completion of each milestone may change depending on a number of factors including the results of the Company's development program, 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 SPORT Surgical System as referenced above are only an estimate based on current information available to the Company and cannot yet be determined with a high degree of certainty, and the costs may be substantially higher than estimated. Please see "*Forward-Looking Statements*".

Please also refer to the risk factors set forth starting on page 16 of the Company's Annual Information Form for the 2017 fiscal year, available on SEDAR at www.sedar.com.

Financings

On June 19, 2018 a share consolidation, on the basis of 30 pre-consolidation common shares forming one post-consolidation common share, was completed and the Company's outstanding common shares ("Common Shares") were adjusted from 419,888,250 to 13,996,275. All references to Common Shares, warrants, and stock options have been updated in the notes to reflect the 1:30 share consolidation.

During the first quarter of 2019, 619,606 warrants had been exercised for gross proceeds of $1,982,739.

Offerings During Q3 2018

On August 10, 2018, the Company completed an offering of securities made pursuant to an agency agreement dated August 7, 2018 between the Company and Bloom Burton Securities Inc. ("Bloom Burton"). The Company sold 7,679,574 units under the offering price of $2.50 per unit for gross proceeds of approximately $19,198,935 ($17,464,711 net of closing cost including cash commission of $1,343,925). Each unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitling the holder to acquire one Common Share at an exercise price of $3.20 and expiring August 10, 2023.

Offerings During Q2 2018

On April 10, 2018, the Company completed an offering of securities pursuant to an agency agreement dated April 3, 2018 between the Company and Bloom Burton. The Company sold 1,126,665 units under the offering at a price of CDN $9.00 per unit for gross proceeds of approximately $8,035,941 ($7,211,320 net of closing costs including cash commission of

$562,516). Each unit consisted of one common share and one warrant, each warrant entitling the holder thereof to acquire one common share at an exercise price of CDN $10.50 and expiring April 10, 2023.

On May 10, 2018, the Company announced the exercise of the over-allotment option granted to Bloom Burton as agent for its offering, at a price of CDN $9.00 per unit, completed on April 10, 2018 and the Company sold an additional 168,889 units at the offering price for additional gross proceeds of $1,189,856 ($1,100,238 net of closing costs including cash commission of $76,988). Each unit consisted of one Common Share of the Company and one warrant, each warrant entitling the holder thereof to acquire one Common Share at an exercise price of CDN $10.50 and expiring April 10, 2023.

Offerings During Q4 2017

On December 5, 2017, the Company completed an offering of securities made pursuant to an agency agreement dated November 30, 2017 between the Company and Bloom Burton. The Company sold 1,533,333 units at a price of CDN $15.00 per unit for gross proceeds of approximately $18,137,800 ($16,555,875 net of closing costs including cash commission of $1,246,185). Each unit consisted of one common share and one warrant, each warrant entitling the

holder thereof to acquire one additional common share at an exercise price of CDN $18.00 and expiring December 5, 2022.

On October 20, 2017 and October 30, 2017, the Company completed a non-brokered private placement offering of 446,197 common shares, for aggregate gross proceeds of $2,677,326 (CDN$3,343,416), to subscribers in Canada, the United States and Europe.

Offerings During Q2 and Q3 2017

On June 29, 2017, the Company completed an offering of securities pursuant to an agency agreement dated June 26, 2017 between the Company and Bloom Burton. At the first closing on June 29, 2017, the Company sold 1,612,955 units at a price of CDN $4.50 per unit for gross proceeds of approximately $5,576,357 ($4,838,002 net of closing costs including cash commission of $382,689). Each unit consisted of one common share and one warrant, each warrant entitles the holder thereof to acquire one common share at an exercise price of CDN $6.00 and expires June 29, 2022. In addition to the cash commission paid to Bloom Burton and selling group members, broker warrants were issued to Bloom Burton and selling group members, which entitle the holder to purchase 109,533 common shares at a price of CDN $4.50 per share prior to expiry on June 29, 2019.

On July 21, 2017, the Company completed a second closing pursuant to which the Company sold an additional 370,567 units at a price of CDN $4.50 per unit for gross proceeds of approximately $1,328,871 ($1,200,788 net of closing costs including cash commission of $93,021). Each unit consisted of one common share and one warrant, each warrant entitles the holder thereof to acquire one common share at an exercise price of CDN $6.00 and expiring June 29, 2022.

Offerings During Q1 2017

On March 16, 2017, Titan completed an offering of securities made pursuant to an agency agreement dated March 10, 2017 between the Company and Bloom Burton. The Company sold 715,573 units under the offering at a price of CDN$10.50 per unit for gross proceeds of approximately $5,642,537 ($5,039,817 net of closing cost including cash commission of $394,316). Each unit consisted of one common share and (i) one-half of one warrant, each whole warrant entitling the holder thereof to acquire one common share of the Company at an exercise price of CDN $12.00 and expiring March 16, 2019, and (ii) one-half of one warrant, each whole warrant entitling the holder thereof to acquire one common share at an exercise price of CDN $15.00 and expiring March 16, 2021.

Private Placements – Longtai Medical Inc.

On August 24, 2017, Titan completed a subscription agreement with Longtai Medical Inc. (“Longtai”) for the equity conversion of Longtai’s $2.0 million distribution deposit. Under the terms of the subscription agreement dated July 31, 2017, Titan issued to Longtai 563,067 units at an assigned issue price of CDN $4.50 per unit. Each unit consists of one Common Share and one warrant, with each warrant exercisable for one Common Share at an exercise price of CDN $6.00 per warrant prior to expiry on August 24, 2022. The warrants were valued at $822,372 based on the value of comparable warrants at the time. The common shares were valued at $1,887,411 based on the market value on August 24, 2017 of CDN $4.20. In addition, because the warrant and the Common Share were valued at fair value in accordance with International Financial

Reporting Interpretations Committee Interpretation #19-Extinguishing Financial Liabilities ("IFRIC 19"), a loss of $709,782 was incurred on extinguishment which is included in the gain (Loss) on change in value of warrant liability in the unaudited condensed.

The utilization of proceeds as outlined in the short form prospectus dated April 3, 2018 and August 7, 2018 has been updated as outlined in the following table

	Proceeds from the Offering as outlined in the short-form prospectus dated April 3, 2018 (including the May 10, 2018 overallotment)	Proceeds from the Offering as outlined in the short-form prospectus dated August 7, 2018	Total
Ongoing development and commercialization of the SPORT Surgical System	$6,649,246	$13,971,769	$20,621,015
General working Capital requirements	1,662,312	3,492,942	5,155,254
Total Net Proceeds	$8,311,558	$17,464,711	$25,776,269

Off-Balance Sheet Arrangements

Other than for leased premises occupied by the Company, as discussed in note 8 of the audited financial statements for the year ended December 31, 2018 and 2017, the Company does not utilize off balance sheet arrangements.

Outstanding Share Data

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

Type of Securities	**Number of Common Shares issued or issuable upon conversion**
Common Shares	22,295,455
Stock options(1)	925,782
Warrants	13,282,253
Broker warrants(2)	786,183

Notes:

(1) The Company has outstanding options enabling certain employees, directors, officers and consultants to purchase Common Shares. Please refer to note 4(b) of the Interim Financial Statements for terms of such options.

(2) Pursuant to the agency agreement in respect of the M a r c h 2 0 1 7 offering, in addition to the cash commission paid to the agents, 50,005 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one Common Share at the price of CDN $10.50 for a period of 24 months following the closing date.

Pursuant to the agency agreement in respect of the June 2017 offering, in addition to the cash commission paid to the agents, 135,473 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one Common Share at the price of CDN $4.50 for a period of 24 months following the closing date.

Pursuant to the agency agreement in respect of the December 2017 offering, in addition to the cash commission paid to the agents, 105,350 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one Common Share at the price of CDN $15.00 for a period of 24 months following the closing date.

Pursuant to the agency agreement in respect of the April 2018 offering, in addition to the cash commission paid to the agents, 89,795 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one Common Share at the price of CDN $9.00 for a period of 24 months following the closing date.

Pursuant to the agency agreement in respect of the August 2018 offering, in addition to the cash commission paid to the agents, 537,570 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one Common Share at the price of CDN $2.50 for a period of 24 months following the closing date.

A total of 918,193 broker warrants were issued in connection with the March 2017, June 2017, December 2017 April 2018, and August 2018 offerings. As of the date hereof, 786,183 broker warrants remain outstanding.

Accounting Policies

The accounting policies set out in the notes to the audited financial statements have been applied in preparing the audited financial statements for the year ended December 31, 2018, and the comparative information presented in the audited financial statements for the year ended December 31, 2017.

These financial statements have been prepared in accordance with accounting principles applicable to going concern, which contemplates that the Company will be able to realize its assets and settle its liabilities in the normal course as they come due during the normal course of operations for the foreseeable future. The Company has shareholders' deficiency of $172,937,694 and current losses of $22,639,272. 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. The Company expects that approximately US $45 million in incremental funding is needed, for the next 12 months to maintain its currently anticipated pace of development. If additional funding is not available, the pace of the Company's product development plan may be reduced. 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. However, based on internal forecasts, Management believes that the Company has sufficient funds to meet its obligations under a reduced development plan, if necessary, for the ensuing twelve months.

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of provisions at the date of the financial statements and the reported amount of expenses during the period. Financial statement items subject to significant judgement include, (a) the measurement of stock based compensation and (b) the fair value estimate of the initial measurement of new warrant liabilities. While management believes that the estimates and assumptions are reasonable, actual results may differ.

(a) ***Stock Options***

The Black-Scholes model used by the Company to determine fair values of stock options and warrants was developed for use in estimating the fair value of the stock options and warrants. This model requires the input of highly subjective assumptions including future stock price volatility and expected time until exercise. Changes in the subjective input assumptions can materially affect the fair value estimate.

*(b) **Warrant Liability***

In accordance with IAS 32, since the exercise price of new warrants are not a fixed amount, they are denominated in a currency (Canadian dollar) other than the Company's functional currency (U.S. dollar), as well as the warrants issued August 10, 2018 with the cashless exercise option. The warrants are accounted for as a derivative financial liability. The warrant liability is initially measured at fair value and subsequent changes in fair value are recorded through net and comprehensive Loss for the period. The accounting guidance for fair value measurements prioritizes the inputs used in measuring fair value into the following hierarchy:

Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 – Inputs other than quoted prices included within Level 1 that are directly or indirectly observable;

Level 3 – Unobservable inputs in which little or no market activity exists, therefore requiring an entity to develop its own assumptions about the assumptions that market participants would use in pricing.

The fair value of the Company's warrant liability is initially based on level 2 (significant observable inputs) and at December 31, 2018 is based on level 1, quoted prices (unadjusted) in an active market, for the Company's listed warrants and level 2 for the Company's unlisted warrants.

Related Party Transactions

During the year ended December 31, 2018, transactions between the Company and directors, officers and other related parties were related to compensation matters in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

Financial Instruments

The Company's financial instruments consist of cash and cash equivalents, amounts receivable, accounts payable and accrued liabilities and warrant liability. The fair value of these financial instruments approximates their carrying values, unless otherwise noted, due to the short term maturities of these instruments or the discount rate applied.

Events Subsequent to the year Ended December 31, 2018

This note has been updated to report on events from January 1, 2019 to March 30, 2020.

COVID-19

Since December 31, 2019, the outbreak of the novel strain of coronavirus, specifically identified as "COVID-19", has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and social distancing, have caused material disruption to business globally resulting in an economic slowdown. Global equity markets have experienced significant volatility and weakness. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The duration and impact of the COVID-19 outbreak is unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on the financial

results and condition of the Company in future periods.

March 2020 Offering

On March 25, 2020, the Company entered into definitive agreements with institutional investors that provide for the purchase and sale of 7,000,000 common shares of the Company (the "Common Shares") at a per share purchase price of US $0.17 per Common Share and 3,500,000 Common Share purchase warrants (each, a "Warrant"), resulting in total gross proceeds of approximately $1.2 million (approximately $0.885 million net of closing costs including cash commission described below). Each whole Warrant is exercisable to purchase one Common Share (a "Warrant Share") at an exercise price of US $0.19 per Common Share for a period of five years following the date of closing of the offering. The warrants were valued at $618,100 based on the value determined by the Black-Scholes model and the balance of $571,900 was allocated to common shares.
H.C. Wainwright & Co.("Wainwright") acted as the exclusive placement agent for the offering. Pursuant to the placement agency agreement, in addition to the cash commission paid to Wainwright of $83,300, broker warrants were issued to Wainwright which entitle the holder to purchase 490,000 Common Shares at a price of US $0.2125 per share prior to expiry on March 25, 2025.

Titan intends to use the net proceeds from the offering for general corporate purposes including: resuming the development of its single-port robotic surgical system, instruments and accessories; funding working capital (including the reduction of outstanding payables); and capital expenditures.

Stock Options

On January 28, 2020, the Company issued 25,765 stock options with an exercise price of CDN $0.657 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years.

Equity Transaction

On January 3, 2020, the Company announced that Cambridge Design Partnership Ltd. ("Cambridge"), has subscribed for common shares of the Company. The Company issued 501,148 Common Shares at a unit price of $0.50 for satisfaction of the trade payable with Cambridge of $250,574 which has been included in capital.

Aspire Transaction

On December 23, 2019, the Company entered into a common share purchase agreement (the "Aspire Agreement") with Aspire Capital Fund, LLC ("Aspire Capital") whereby Aspire Capital committed to purchase up to $35 million of common shares of Titan ("Common Shares") at Titan's request from time to time, until June 23, 2022 (the "Aspire Transaction"). On commencement of the Aspire Agreement, Titan issued to Aspire Capital 973,000 Common Shares, then issued and outstanding as consideration for entering into the Aspire Agreement. The value of the Common Shares issued of $423,440, was been included in capital, offset by a fee valued at the same amount plus $35,122 other costs incurred pursuant to the Aspire Transaction. In the first quarter of 2020, Titan sold Common Shares to Aspire pursuant to the Aspire Agreement as outlined in the following table:

Grant Date	Common shares issued		Value
January 3, 2020	500,000	$	219,600
January 6, 2020	500,000		229,300
January 8, 2020	400,000		195,160
January 10, 2020	500,000		247,550
January 17, 2020	600,000		303,000
January 23, 2020	600,000		295,320
February 6, 2020	600,000		282,000
February 13, 2020	708,048		300,000
	4,408,048	$	2,071,930

First Aspire Transaction

On August 29, 2019, the Company entered into a common share purchase agreement (the "First Aspire Agreement") with Aspire Capital whereby Aspire Capital committed to purchase up to $35 million of common shares of Titan at Titan's request from time to time, until February 28, 2022. 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 $3.0 million and issued to Aspire Capital 639,837 Common Shares, representing 1.9% of the Common Shares then issued and outstanding as consideration for entering into the First Aspire Agreement. Northland Securities, Inc. acted as the Company's agent and financial advisor in connection with the offering and pursuant to an agency agreement, was paid a cash fee of $160,000. The gross proceeds of $3.0 million, net of costs and fees of $417,113 has been included in capital. Subsequent to August 29, 2019 and subject to the First Aspire Agreement, the Company issued Common Shares to Aspire as outlined in the following table:

Grant Date	Common shares issued		Value
August 30, 2019	2,417,162	$	3,000,000
November 8, 2019	100,000		42,560
November 8, 2019	100,000		42,560
November 12, 2019	100,000		42,970
November 12, 2019	100,000		42,000
November 13, 2019	100,000		42,970
November 14, 2019	300,000		128,910
November 15, 2019	2,500,000		1,074,250
November 19, 2019	2,067,282		888,311
	7,784,444	$	5,304,531

March 2019 Offering

On March 21, 2019, Titan completed an offering of securities made pursuant to an agency agreement dated March 18, 2019 between the Company and Bloom Burton Securities Inc. (the "Agent"). The Company sold 8,455,882 Units under the Offering at a price of US $3.40 per Unit for gross proceeds of approximately $28,750,000 ($25,426,744 net of closing cost including cash commission of $2,012,500). Each Unit consisted of one Common Share of the Company and one Common Share purchase warrant, each warrant entitles the holder thereof to acquire one Common Share of the Company at an exercise price of US $4.00 and expiring March 21, 2024. The warrants were valued at $15,897,059 based on the value determined by the Black-Scholes model and the balance of $12,852,941 was allocated to common shares.

Pursuant to the agency agreement, in addition to the cash commission paid to the Agent, broker warrants were issued to the Agent which entitle the holder to purchase 591,911 Common Shares at a price of US $3.40 per share prior to expiry on March 21, 2021. The broker warrants were valued using the Black-Scholes model and the value of $864,190 was accounted for as an increase in the closing costs and allocated between the shares and the warrants.

During the quarter ended March 31, 2019, 1,018,506 warrants were exercised for total proceeds of $3,259,219. The fair value of the exercised warrants was $3,742,824 which was reclassed from warrant liability to common stock. No additional warrants were exercised during 2019.

Stock Options and Compensation Options

On May 29, 2019, the shareholders of Titan approved an increase of its reserve for options from 10% and set aside up to 15% of the issued and outstanding shares of Titan for granting of options to employees, officers, consultants and advisors. At December 31, 2019, 5,986,152 common shares (December 31, 2018: 1,241,803) were available for issue in accordance with the Company's stock option plan. The terms of these options are determined by the Board of Directors.

On May 29, 2019, the shareholders approved amendments to the exercise prices of options previously granted to Executive Officers and Other Employees of the Company under the Option Plan. The Exercise price was amended to be US $3.40 (CDN $4.54) per option, being the higher of the March 21, 2019 offering price of US $3.40 per share and the five-day volume weighted average price as determined as of the close of business on May 28, 2019.
Options are granted to Directors, Officers, Employees and Consultants at various times. Options are to be settled by physical delivery of shares. Options and the terms of each issue for the period from January 1, 2019 to date are outlined below.

Grant date/ Recipient	Number of Options	Vesting Conditions	Contractual Life of Options
February 14, 2019, options granted to a Consultant	40,000	Options may vest over a 15-month vesting schedule	Cancelled
May 29, 2019, options granted to a Director	253,000	Options vest over a specified vesting period not exceeding 4 years	7 years
June 28, 2019, options granted to an Employee	10,000	Options vest as to 1/3 of the total number of Options granted, every year from Grant Date	7 years
July 18, 2019, options granted to a Director	25,719	Options vest immediately	7 years
July 19, 2019, options granted to an Employee	467,255	Options vest as to 1/4 of the total number of Options granted, every year from Grant Date	7 years
July 19, 2019, options granted to a Consultant	2,165	Options vest as to 1/3 of the total number of Options granted, every year from Grant Date	7 years
July 19, 2019, options granted to a Director	41,273	Options vest immediately	7 years
September 9, 2019, options granted to a Consultant	40,000	Options vest over a 15-month vesting schedule subject to achieving certain milestones.	2.5 years

Outlook

By internal estimates, management believes there is an opportunity for the Company to access an unaddressed U.S. market that potentially may include more than $12 billion in capital equipment revenue and more than $3 billion in associated annual recurring revenue, including smaller hospitals and the underserved ambulatory surgery center market segment.

To date, experienced robotic surgeons performed 45 single-port procedures, including 43 live porcine and two cadaver studies, at the Company's three Centers of Excellence in the US and Europe using the SPORT Surgical System. These studies assisted in validating prototype performance in preclinical settings.

During the studies, essential areas for improvement of the surgical system were identified, including enhancements to the camera and light source, hand controls, instruments and the mechanisms of the patient cart and software throughout the system to ensure safe and reliable system operation. The final design is intended to address performance and usability requirements of prospective surgeon customers, as well as the needs of operating room support personnel and hospital administrators. The Company successfully completed, on schedule, the planned SPORT Surgical System capital equipment engineering confidence build based on the improved design by year-end 2018.

In the first quarter of 2019, the Company plans to complete and document the results of confidence build unit testing, implement subsystem design improvements and schedule the preliminary audit of the Company's quality system by a European Notified Body.

Throughout the balance of 2019, management plans to continue to focus on product development for manufacturing, including hardware and software at all levels, involving the workstation, patient cart, instruments, camera and light source, and disposable components that facilitate successful surgery. As improvements are identified and made to the system, advanced prototypes will be upgraded and deployed at one or more of the Centers of Excellence for further preclinical evaluation in live animal and cadaver studies to ensure that the improvements are effective. This work must be completed before achieving design freeze and proceeding with summative evaluation usability tests with the final product, and validation studies required for regulatory filings.

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. The associated Q-Submission milestone has been achieved well in advance of an earlier projection for completion in 2019. The Company plans to design and execute its studies based on the FDA's responses, with the intent of filing a fully compliant 510(k) application by year-end.

Through its correspondence and discussions with the FDA, the Company has confirmed that confirmatory human data will be required for its planned regulatory submission. The performance of human surgeries with the SPORT 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 will be necessary to perform the surgeries. Each of these sites will require approval of their independent Institutional Review Board ("IRB") to approve the studies. During the first three quarters of 2019, the Company plans to pursue the recruitment of surgeons and hospitals for the studies, IDE approval by the FDA, and approvals by the IRB of each hospital, in preparation for the confirmatory human studies planned for completion during the fourth quarter.

Over the next twelve months, the Company plans to raise additional capital to finance the development and commercialization of the SPORT Surgical System. The company will continue to explore alternative sources in order to minimize dilutive effects, including strategic partnerships, private placements and debt. Management will continue to assess the reasonableness of development milestones, as well as timelines and related cost estimates, as financing is secured and development continues.

The Company continues to engage external technical experts and subcontractors with experience in key technical areas to provide an accelerated pathway to subsystems development with current technology. Further, the Company plans to continue to protect its intellectual property by securing additional patents. The pace at which the Company can carry out these activities will be substantially dependent on its ability to raise the necessary capital on a timely basis.

Additional information relating to the Company, including Titan's Annual Information Form for the 2017 fiscal year, is available on SEDAR at www.sedar.com.

Exhibit 15.3

Consent of Independent Registered Public Accounting Firm

Titan Medical Inc.
Toronto, Canada

We hereby consent to the filing in this Annual Report on Form 20-F for the year ended December 31, 2019 with the United States Securities and Exchange Commission of (i) our report dated March 30, 2020, on the financial statements of Titan Medical Inc. (the "Company") for the year ended December 31, 2019; and (ii) our report dated March 30, 2019, on the financial statements of the Company for the year ended December 31, 2018, as amended to include subsequent events from February 19, 2019 to March 30, 2020.

We also consent to the incorporation by reference of such reports into the Company's (i) Registration Statement No. 333-229612 on Form S-8, (ii) Registration Statement No. 333-225962 on Form F-10, as amended, (iii) Registration Statement No. 333-230072 on Form F-10, as amended, and (iv) Registration Statement No. 333-232898 on Form F-3.

"signed"

BDO Canada LLP
Toronto, Canada
March 30, 2020