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

FORM 40-F

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934**
☒ **ANNUAL REPORT PURSUANT TO SECTION 13(a) OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2020 **Commission File Number 001-38524**

TITAN MEDICAL INC.
(Exact name of Registrant as specified in its charter)

Ontario, Canada
(Province or other jurisdiction of incorporation or organization)

3841
(Primary Standard Industrial Classification Code Number (if applicable))

98-0663504
(I.R.S. Employer Identification Number (if applicable))

155 University Avenue, Suite 750
Toronto, Ontario M5H 3B7
(416) 548-7522
(Address and telephone number of Registrant's principal executive offices)

CT Corporation System
1015 15th Street N.W., Suite 1000
Washington, DC 20005
(202) 572-3133
(Name, address (including zip code) and telephone number (including area code)
of agent for service in the United States)

Securities registered or to be 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 or to be registered pursuant to Section 12(g) of the Act: Not applicable.

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: Not applicable.

For annual reports, indicate by check mark the information filed with this Form:

☒ Annual information form ☒ Audited annual financial statements

Number of outstanding shares of each of the issuer's classes of
capital or common stock as of December 31, 2020:
83,184,843 Common Shares, no par value

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act 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 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 such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 12b-2 of the Exchange Act. Emerging growth company ☒

If an emerging growth company that prepares is 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 whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.☐

EXPLANATORY NOTE

Titan Medical Inc. (the "**Company**" or the "**Registrant**") is a Canadian issuer that is permitted, under the multijurisdictional disclosure system adopted in the United States, to prepare this Annual Report on Form 40-F (this "**Annual Report**") pursuant to Section 13 of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), in accordance with Canadian disclosure requirements, which are different from those of the United States. 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.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report, including any documents incorporated by reference herein, contains "forward-looking statements" or "forward-looking information" within the meaning of applicable Canadian and United States securities legislation (collectively, "**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", "expectation", "anticipates", "believes", "intends", "estimates", "predicts", "continues", "potential", "targeted", "plans", "possible" and similar expressions, or statements that events, conditions or results "will", "may", "could", "would" or "should" occur or be achieved. Any forward-looking statements or statements of "belief" 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 technology and research and development objectives, including development milestones, estimated costs, schedules for completion and probability of success;
- the Company's intention with respect to updating any forward-looking statement after the date on which such statement is made or to reflect the occurrence of unanticipated events;
- the Company's business plan consists of the development of robotic-assisted surgical technologies for application in minimally invasive surgery ("**MIS**") comprising its Enos system;
- the Enos 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;
- the Enos system under development includes a surgeon workstation that provides the surgeon with an ergonomic interface to the patient cart and a 3D high-definition view of the MIS procedures;
- the Company's intent to initially pursue gynecologic surgical indications for use of its Enos system;
- the Company's plan to continue development of a robust training curriculum and post-training assessment tools for surgeons and surgical teams;
- the training curriculum, which 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, which will include validation of the effectiveness of those assessment tools;

- the Company will likely proceed with a De Novo classification submission for the Enos system, while continuing to evaluate its options for use of the 510(k) submission pathway;
- the Company's intention to continue with the De Novo classification process if the 510(k) submission pathway is not available to the Company or would otherwise present other difficulties;
- the outcome of any review by the FDA and the time required to complete activities necessary for regulatory approval or clearance;
- the Company's plans on further communications with the FDA and to file additional Pre-Submissions to clarify the requirements for the IDE clinical study protocol and understand any special controls which the FDA may apply;
- the performance of human surgeries with the Enos system will require an Investigational Device Exemption ("**IDE**") from the Food and Drug Administration ("**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;
- an application to the IRB of each hospital will be made once the FDA has approved the Company's IDE application;
- the Company's intention to submit to the FDA an application for marketing authorization upon successful completion of the IDE clinical study;
- the Company's ability to secure required capital to fund development and operating costs in a timely manner;
- actual costs and development times, which will exceed those previously set forth by the Company in years prior to 2020;
- the fact that the Company cannot produce an accurate estimate of the future costs of the development milestones and regulatory phases for the Enos system beyond the year 2022;
- 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, "Development Plan" in the AIF, and the footnotes thereunder;
- the indication of additional specific milestones as the development of the Enos system progresses;
- the Company's plan to further expand its patent portfolio by filing additional patent applications as it progresses in the development of robotic-assisted surgical technologies and, potentially, by licensing suitable technologies;
- the Company's intention to secure additional financing to continue the Company's research and development program through to completion and take advantage of future opportunities;
- the Company's expectation that it will be able to finance its continuing operations by accessing public markets for its securities;
- the Company's intention with respect to not paying any cash dividends on the Company's common shares (the "**Common Shares**") in the foreseeable future; and

- the Company's intention to retain future earnings, if any, to finance expansion and growth.

Forward-looking statements are statements about the future and are inherently uncertain, and actual results of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, including those referred to in the section titled "Risk Factors" the Annual Information Form of the Registrant for the year ended December 31, 2020 (the "**AIF**"), attached as Exhibit 99.1 to this Annual Report. These risks include, but are not limited to:

- the Company will require additional financing which may not be available to us on acceptable terms, or at all;
- the Company has a history of losses and there is no guarantee that the Company will be able to achieve profitability;
- the Company relies on contractual arrangements and there can be no assurance that these arrangements will achieve their goals;
- the Company depends on key personnel and the loss of the service of such personnel could have a negative impact on the Company's business;
- the Company expects to increase the size of the Company's management team in the future and the Company's failure to attract and retain new members of the Company's management team could adversely affect the Company's business;
- the Company's trade secrets or other confidential information may be compromised;
- the Company relies on third parties for a number of important aspects of the Company's business and there are a range of issues that are outside of the Company's direct control;
- the Company's industry is highly competitive, and a number of the Company's competitors have significantly greater financial and human resources than the Company;
- the Company's commercial success depends significantly on the Company's ability to operate without infringing the patents and other proprietary rights of third parties;
- should the Company be unable to obtain and enforce its patent rights, the Company's business could be materially harmed;
- the Company may be unable to obtain or maintain the Company's trademarks and may incur substantial costs attempting to defend and enforce the Company's rights in this regard;
- certain of the Company's directors and officers also serve as directors and/or officers of other companies, creating the possibility that a conflict of interest could arise;
- the Company's financial results and results of operations have fluctuated in the past and may continue to be volatile going forward;
- the Company is targeting a rapidly evolving robotic assisted surgical device market, and it is not clear that surgeons or hospitals will choose the Enos system over those offered by the Company's competitors;
- the introduction of more technologically advanced products and/or new entrants to the market could impact the Company's operating and financial results;

- the Company may become subject to potential product liability claims, and the Company may be required to pay damages that exceed the Company's insurance coverage;
- the Company's technology may depend on third party licenses for certain functions or procedures and there can be no guarantee that the Company will be able to secure and maintain those licenses;
- government and agency regulation controls all aspects of the Company's product and business, and changes in policies and additional regulations may be enacted that could prevent or delay regulatory clearance or approval of the Company's products;
- should the Company be granted FDA marketing authorization, the Company may subsequently decide to make certain modifications to the Company's products for a number of reasons including those based on customer feedback and/or in view of competitive offerings;
- a recall of the Company's products, either voluntarily or at the direction of the FDA or another governmental authority or regulatory body, or the discovery of serious safety issues with the Company's products, could have a significant adverse impact on the Company;
- compliance with accounting regulations and tax rules across multiple jurisdictions is resource intensive and expensive and could expose the Company to penalties and fines;
- contingent liabilities could have a negative impact on the Company's financial position;
- there can be no certainty that the Company will meet the Company's established product development and commercialization milestones, and failure to do so may affect the Company's operational and financial results;
- Commercial manufacturing of the Enos system is expected to be an extremely detailed and complex process with the potential for delays, interruptions, or cost overruns;
- the Company's reliance on suppliers and development firms for execution of the Company's development programs means that the Company do not control all aspects of the development;
- a product malfunction, including in any clinical studies, could result in delays, liability and negative perceptions of the Enos system and the Company;
- certain reusable instruments, camera components and other accessories require repeated cleaning and sterilization;
- as the Company is a Canadian company, it may be difficult for U.S. shareholders to effect service on the Company or to realize on judgments obtained in the U.S.;
- the Company is subject to risks related to additional regulatory burden and controls over financial reporting;
- fluctuations in foreign currency exchange rates may adversely affect the Company's financial results;
- the Company may not be able to maintain the Company's status as a "Foreign Private Issuer";
- the Company is an "emerging growth company" and cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make it less attractive to investors;
- the Company is likely a "passive foreign investment company", which may have adverse U.S. federal income tax consequences for U.S. investors;

- the Company may face or otherwise be exposed to cyber-security risks and threats;
- the Company's financial condition and results of operations for fiscal 2021 may be adversely affected by the global COVID-19 pandemic;
- the global COVID-19 pandemic creates substantial uncertainty as to the willingness and ability of hospitals, health maintenance organizations (HMOs), ambulatory care facilities and other prospective customers to purchase and implement robotic surgical systems; and
- material weaknesses in the Company's internal controls over financial reporting.

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

- general business and current global economic conditions;
- future success of current research and development activities;
- achieving development milestones;
- ability to achieve product cost targets;
- competition;
- no significant changes to regulatory clearance or approval processes in the United States and Europe;
- stable tax rates and benefits;
- the availability of financing on a timely basis;
- the Company's and competitors' costs of production and operations;
- the Company's ability to attract and retain skilled employees;
- the Company's ongoing relations with its third-party service providers;
- the design of the Enos system and related platforms and equipment;
- the progress and timing of the development of the Enos system;
- costs related to the development of the Enos system;
- receipt of all applicable regulatory approvals or clearances;
- estimates and projections regarding the robotic-assisted surgery equipment industry;
- protection of the Company's intellectual property rights;
- market acceptance of the Company's systems under development;
- the Company's ability to meet the continued listing standards of NASDAQ and the TSX; and

- the type of specialized skill and knowledge required to develop the Enos system and the Company's access to such specialized skill and knowledge.

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

NOTE TO UNITED STATES READERS - DIFFERENCES IN UNITED STATES AND CANADIAN REPORTING PRACTICES

The Registrant is permitted, under a multijurisdictional disclosure system adopted by the United States Securities and Exchange Commission (the "**SEC**"), to prepare this Annual Report in accordance with Canadian disclosure requirements, which are different from those of the United States. The Registrant prepares its financial statements, which are filed as Exhibit 99.2 to this Annual Report and incorporated by reference herein, in accordance with International Financial Reporting Standards ("**IFRS**"), as issued by the International Accounting Standards Board, and which are not comparable to financial statements of United States companies.

CURRENCY

Unless otherwise indicated, all dollar amounts in this Annual Report on Form 40-F are in United States dollars. The exchange rate of Canadian dollars into United States dollars, on December 31, 2020 based upon the daily exchange rate as quoted by the Bank of Canada was U.S.$1.00 = CDN$1.2732.

ANNUAL INFORMATION FORM

The Registrant's Annual Information Form for the fiscal year ended December 31, 2020 is filed as Exhibit 99.1 to this Annual Report and is incorporated by reference herein.

AUDITED ANNUAL FINANCIAL STATEMENTS

The audited consolidated financial statements of the Registrant for the years ended December 31, 2020 and 2019, including the report of the independent auditor thereon, are filed as Exhibit 99.2 to this Annual Report and are incorporated by reference herein.

MANAGEMENT'S DISCUSSION AND ANALYSIS

The Registrant's Management's Discussion and Analysis (the "**MD&A**") dated February 20, 2021 for the year ended December 31, 2020, is filed as Exhibit 99.3 to this Annual Report and is incorporated by reference herein.

TAX MATTERS

Purchasing, holding, or disposing of the Company's securities may have tax consequences under the laws of the United States and Canada that are not described in this Annual Report.

CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

The Company's management, with the participation of the company's chief executive officer ("**CEO**") and chief financial officer ("**CFO**"), evaluated the effectiveness of the company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2020. Based upon that evaluation, and due to the material weaknesses in the Company's internal control over financial reporting discussed below, the CEO and CFO have concluded that, as of December 31, 2020, the Company's disclosure controls and procedures were not effective to ensure (i) that information required to be disclosed by the 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, and (ii) that information required to be disclosed by the 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.

Management's Annual Report on Internal Control over Financial Reporting

The Company's management, including the CEO and CFO, is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) of the Exchange Act. The CEO and CFO evaluated the effectiveness of the Company's internal controls over financial reporting as at December 31, 2020. The Company's management used the framework in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to perform this evaluation. Based upon this evaluation, management concluded as of December 31, 2020, that the Company's internal control over financial reporting was not effective due to the material weaknesses described below.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

Identified Material Weaknesses

According to the Public Company Accounting Oversight Board Auditing Standard No. 5, a material weakness is a deficiency or a combination of deficiencies in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

During the preparation of its financial statements for the year ended December 31, 2020, management became aware of certain errors in the calculation of asset and liability balances and the appropriate IFRS application and disclosure required for an amendment to a contract with an external development firm. The errors were corrected in the Company's financial results for the year ended December 31, 2020.

The material weaknesses identified were:

a) the Company did not have sufficient accounting resources with relevant technical accounting skills to address issues relating to the assessment of IFRS treatment for complex accounting issues, specifically relating to a material amendment to a contract with an external development firm;

b) the Company did not have sufficient accounting resources with relevant technical accounting skills to address and review issues relating to the valuation of warrant liabilities; and

c) the Company did not sufficiently design internal controls to provide the appropriate level of oversight regarding the financial recordkeeping and review of the Company's cut-off procedures as they relate to accounts payable and valuation of supplier liabilities.

The errors identified in the calculation of asset and liability balances were all non-cash items and were corrected in the financial statements for the year ended December 31, 2020, prior to their approval by the Company's audit committee and their filing or other disclosure to the public.

Remediation Plan for the Material Weaknesses

The Company has been actively engaged in developing remediation plans to address the identified material weaknesses. The remediation efforts in process or expected to be implemented include the following:

a) engagement of one or more qualified and independent consulting firms with subject matter experts to assist with the Company's internal accounting and reporting over complex accounting issues;

b) institution of business systems to support the work associated with the valuation and reporting of the warrant liabilities and other equity-based securities; and

c) engagement of an external consulting firm to assist with increasing the Company's in-house resources to increase the number of qualified personnel involved in financial accounting and reporting.

Despite the material weaknesses, after adjusting the financial statements of the Company as at and for the year ended December 31, 2020 prior to their approval by the Company's audit committee, and their filing in compliance with securities regulations or other public disclosure, the Company has concluded that the audited consolidated financial statements as at and for the year ended December 31, 2020, will present fairly, in all material respects, the Company's financial position, results of operations, changes in equity and cash flows in accordance with IFRS.

As the Company continues to evaluate and work to improve its internal controls over financial reporting, the Company may determine to take additional measures to address the material weaknesses or determine to supplement or modify certain of the remediation measures described above.

Attestation Report of the Registered Public Accounting Firm

This Annual Report does not include an attestation report of the Company's registered public accounting firm because emerging growth companies are exempt from this requirement for so long as they remain emerging growth companies.

Changes in Internal Control over Financial Reporting

During the period covered by this Annual Report, no change occurred in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting, other than as discussed above.

CORPORATE GOVERNANCE

The Company's Board of Directors (the "**Board of Directors**") is responsible for the Company's corporate governance and has a separately designated standing Corporate Governance and Nominating Committee, Compensation Committee and an Audit Committee. The Board of Directors has determined that all of the members of the Corporate Governance and Nominating Committee, Compensation Committee and Audit Committee are independent, based on the criteria for independence prescribed by Rule 10A-3 of the Exchange Act and Rule 5605(a)(2) of the NASDAQ Stock Market Rules.

Corporate Governance and Nominating Committee

The Corporate Governance and Nominating Committee is responsible for overseeing and assessing the functioning of the Board of Directors and the committees of the Board of Directors and for the development, recommendation to the Board of Directors, implementation and assessment of effecting corporate governance principles. The Corporate Governance and Nominating Committee's responsibilities also include identifying candidates for directorship and recommending that the Board of Directors select qualified director candidates for election at the annual meeting of shareholders.
The Company's Corporate Governance and Nominating Committee is comprised of Anthony J. Giovinazzo, Paul Cataford and Cary G. Vance, all of whom, in the opinion of the Company's Board of Directors, are independent (as determined under Rule 10A-3 of the Exchange Act and Rule 5605(a)(2) of the NASDAQ Stock Market Rules).

Compensation Committee

The Compensation Committee assists the Board of Directors in discharging the Board of Director's responsibilities relating to the compensation and retention of key senior management employees with the skills and expertise needed to enable the Company to achieve its goals and strategies at fair and competitive compensation, including appropriate incentives. The Compensation Committee is responsible for:

- reviewing compensation payable to the Chief Executive Officer of the Company and other executives;
- reviewing the compensation payable to directors;
- overseeing the administration of compensation plans;
- reviewing executive and director compensation disclosure to be made in the proxy circular prepared in connection with the Company's annual meeting of shareholders; and
- reviewing the Company's compensation standards, along with management's annual recommendations, to ensure each are consistent with each other and currently appropriate.

The Company's Compensation Committee is comprised of Anthony J. Giovinazzo, Paul Cataford and Cary G. Vance, all of whom, in the opinion of the Company's Board of Directors, are independent (as determined under Rule 10A-3 of the Exchange Act and Rule 5605(a)(2) of the NASDAQ Stock Market Rules).

AUDIT COMMITTEE

The Board of Directors has a separately designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act and Rule 5602(c) of the NASDAQ Stock Market Rules. The Company's Audit Committee is comprised of Anthony J. Giovinazzo, Paul Cataford and Cary G. Vance, all of whom, in the opinion of the Company's Board of Directors, are independent (as determined under Rule 10A-3 of the Exchange Act and Rule 5605(a)(2) of the NASDAQ Stock Market Rules). All three members of the Audit Committee are financially literate, meaning they are able to read and understand the Company's financial statements and to understand the breadth and level of complexity of the issues that can reasonably be expected to be raised by the Company's financial statements. The Audit Committee meets the composition requirements set forth by Section 5605(c)(2) of the NASDAQ Stock Market Rules.

The members of the Audit Committee are appointed by the Company's Board of Directors, on the recommendation of the Corporate Governance and Nominating Committee, annually. Each member of the Audit Committee will remain on the committee until the next annual meeting of shareholders after his or her appointment, unless otherwise removed or replaced by the Board of Directors at any time.

The full text of the Audit Committee Charter is available on the Company's website at www.titanmedicalinc.com and is attached as Schedule A to the AIF, which is filed as Exhibit 99.1 to this Annual Report.

Audit Committee Financial Expert

The Board of Directors has determined thatPaul Cataford (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).

PRE-APPROVAL OF AUDIT AND NON-AUDIT SERVICES PROVIDED BY INDEPENDENT AUDITOR

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 any pre-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, 2020 were pre-approved by the Audit Committee of the Company. No non-audit services were approved pursuant to the *de minimis* exemption to the pre-approval requirement.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information provided under the heading "*Audit Committee – External Auditor Service Fees*" contained in the AIF, filed as Exhibit 99.1 hereto, is incorporated by reference herein.

OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements.

CODE OF ETHICS

The Company has adopted a Code of Conduct 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 General Instruction 9(b) of the Form 40-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, 2020, 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.

TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The information provided under the heading "*Liquidity and Capital Resources*" contained in the MD&A, filed as Exhibit 99.3 hereto, is incorporated by reference herein.

NOTICES PURSUANT TO REGULATION BTR

There were no notices required by Rule 104 of Regulation BTR that the Company sent during the year ended December 31, 2020 concerning any equity security subject to a blackout period under Rule 101 of Regulation BTR.

MINE SAFETY DISCLOSURE

Not applicable.

NASDAQ STATEMENT OF GOVERNANCE DIFFERENCES

The Company is a "foreign private issuer" as defined in Rule 3b-4 under Exchange Act and its Common Shares are listed on The NASDAQ Stock Market LLC ("**NASDAQ**") and the Toronto Stock Exchange ("**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.

UNDERTAKING

The Company undertakes to make available, in person or by telephone, representatives to respond to inquiries made by SEC staff, and to furnish promptly, when requested to do so by SEC staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

CONSENT TO SERVICE OF PROCESS

The Company has previously filed with the SEC a written consent to service of process on Form F-X. Any change to the name or address of the Company's agent for service shall be communicated promptly to the SEC by amendment to the Form F-X referencing the file number of the Company.

SIGNATURES

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereto duly authorized.

DATED this 31st day of March, 2021.

TITAN MEDICAL INC.

By: */s/ Monique L. Delorme*
Name: Monique L. Delorme
Title: Chief Financial Officer

EXHIBIT INDEX

The following documents are being filed with the SEC as Exhibits to this Form 40-F:

Exhibit Number	Description
99.1	Annual Information Form dated March 31, 2021 for the fiscal year ended December 31, 2020
99.2	Audited Consolidated Financial Statements for the years ended December 31, 2020 and 2019
99.3	Management's Discussion and Analysis dated February 20, 2021 for the year ended December 31, 2020
99.4	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the U.S. Securities Exchange Act of 1934, as amended
99.5	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the U.S. Securities Exchange Act of 1934, as amended
99.6	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.7	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.8	Consent of BDO Canada LLP
101.INS	XBRL Instance
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

TITAN MEDICAL

ANNUAL INFORMATION FORM

For the fiscal year ended December 31, 2020

March 31, 2021

TITAN MEDICAL

TITAN MEDICAL INC. ANNUAL INFORMATION FORM

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CORPORATE STRUCTURE

Name, Address, and Incorporation

Titan Medical Inc. ("Titan" or the "Company" or "we") is the successor corporation formed by amalgamation under the *Business Corporations Act* (Ontario) on July 28, 2008. 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 and its website address is www.titanmedicalinc.com.

Intercorporate Relationships

On May 29, 2020, the Company established Titan Medical USA Inc. ("Titan USA" or "Subsidiary"), a Delaware corporation and a wholly owned subsidiary of the Company. Titan USA's principal activity consists of research and development from its premises located in Chapel Hill, North Carolina, United States.

Currency

All currency amounts in this annual information form are in U.S. dollars unless otherwise indicated.

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

This annual information form and the documents incorporated by reference herein contain "forward-looking information" and "forward-looking statements", within the meaning of applicable Canadian and United States securities laws (collectively herein referred to as "forward-looking statements"). These statements relate to future events or future performance and reflect the Company's expectations and assumptions regarding the growth, results of operations, performance and business prospects and opportunities of the Company. These forward-looking statements are made as of the date of this Annual Information Form or, in the case of documents incorporated by reference herein, as of the date of such documents. Forward-looking statements are frequently, but not always, identified by words such as "expects", "expectation", "anticipates", "believes", "intends", "estimates", "predicts", "continues", "potential", "targeted", "plans", "possible" and similar expressions, or statements that events, conditions or results "will", "may", "could", "would" or "should" occur or be achieved. Any forward-looking statements or statements of "belief", including the statements made under "Risk Factors", represent the Company's estimates only as of the date of this short form prospectus and the documents incorporated by reference herein, respectively, and should not be relied upon as representing the Company's estimates as of any subsequent date. These forward-looking statements may concern anticipated developments in the Company's operations in future periods, the adequacy of the Company's financial resources and other events or conditions that may occur in the future, and include, without limitation, statements regarding:

- the Company's technology and research and development objectives, including development milestones, estimated costs, schedules for completion and probability of success;
- the Company's intention with respect to updating any forward-looking statement after the date on which such statement is made or to reflect the occurrence of unanticipated events;
- the Company's business plan consists of the development of robotic-assisted surgical technologies for application in minimally invasive surgery ("MIS") comprising its Enos system;
- the Enos 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;
- the Enos system under development includes a surgeon workstation that provides the surgeon with an ergonomic interface to the patient cart and a 3D high-definition view of the MIS procedures;
- the Company's intent to initially pursue gynecologic surgical indications for use of its Enos system;
- the Company's plan to continue development of a robust training curriculum and post-training assessment tools for surgeons and surgical teams;
- the training curriculum, which 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, which will include validation of the effectiveness of those assessment tools;
- the Company will likely proceed with a De Novo classification submission for the Enos system, while continuing to evaluate its options for use of the 510(k) submission pathway;
- the Company's intention to continue with the De Novo classification process if the 510(k) submission pathway is not available to the Company or would otherwise present other difficulties;
- the outcome of any review by the Food and Drug Administration of the United States Department of Health and Human Services (the "FDA") and the time required to complete activities necessary for regulatory approval or clearance;
- the Company's plans on further communications with the FDA and to file additional Pre-Submissions to clarify the requirements for the IDE clinical study protocol and understand any special controls which the FDA may apply;
- the performance of human surgeries with the Enos system will require an Investigational Device Exemption ("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;
- an application to the IRB of each hospital will be made once the FDA has approved the Company's IDE application;
- the Company's intention to submit to the FDA an application for marketing authorization upon successful completion of the IDE clinical study;
- the Company's ability to secure required capital to fund development and operating costs in a timely manner;
- actual costs and development times, which will exceed those previously set forth by the Company in years prior to 2020;
- the fact that the Company cannot produce an accurate estimate of the future costs of the development milestones and regulatory phases for the Enos system beyond the year 2022;
- 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, "Development Plan" and the footnotes thereunder;
- the indication of additional specific milestones as the development of the Enos system progresses;
- the Company's plan to further expand its patent portfolio by filing additional patent applications as it progresses in the development of robotic-assisted surgical technologies and, potentially, by licensing suitable technologies;
- the Company's intention to secure additional financing to continue the Company's research and development program through to completion and take advantage of future opportunities;
- the Company's expectation that it will be able to finance its continuing operations by accessing public markets for its securities;
- the Company's intention with respect to not paying any cash dividends on the Company's common shares (the "Common Shares") in the foreseeable future; and
- the Company's intention to retain future earnings, if any, to finance expansion and growth.

Forward-looking statements are statements about the future and are inherently uncertain, and actual results of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, including those referred to in this Annual Information Form, including but not limited to those described in the section titled, "Risk Factors", in this Annual Information Form, in any document incorporated by reference herein. These risks include, but are not limited to:

- the Company will require additional financing which may not be available to us on acceptable terms, or at all;
- the Company has a history of losses and there is no guarantee that the Company will be able to achieve profitability;
- the Company relies on contractual arrangements and there can be no assurance that these arrangements will achieve their goals;
- the Company depends on key personnel and the loss of the service of such personnel could have a negative impact on the Company's business;

- the Company expects to increase the size of the Company's management team in the future and the Company's failure to attract and retain new members of the Company's management team could adversely affect the Company's business;
- the Company's trade secrets or other confidential information may be compromised;
- the Company relies on third parties for a number of important aspects of the Company's business and there are a range of issues that are outside of the Company's direct control;
- the Company's industry is highly competitive, and a number of the Company's competitors have significantly greater financial and human resources than the Company;
- the Company's commercial success depends significantly on the Company's ability to operate without infringing the patents and other proprietary rights of third parties;
- should the Company be unable to obtain and enforce its patent rights, the Company's business could be materially harmed;
- the Company may be unable to obtain or maintain the Company's trademarks and may incur substantial costs attempting to defend and enforce the Company's rights in this regard;
- certain of the Company's directors and officers also serve as directors and/or officers of other companies, creating the possibility that a conflict of interest could arise;
- the Company's financial results and results of operations have fluctuated in the past and may continue to be volatile going forward;
- the Company is targeting a rapidly evolving robotic assisted surgical device market, and it is not clear that surgeons or hospitals will choose the Enos system over those offered by the Company's competitors;
- the introduction of more technologically advanced products and/or new entrants to the market could impact the Company's operating and financial results;
- the Company may become subject to potential product liability claims, and the Company may be required to pay damages that exceed the Company's insurance coverage;
- the Company's technology may depend on third party licenses for certain functions or procedures and there can be no guarantee that the Company will be able to secure and maintain those licenses;
- government and agency regulation controls all aspects of the Company's product and business, and changes in policies and additional regulations may be enacted that could prevent or delay regulatory clearance or approval of the Company's products;
- should the Company be granted FDA marketing authorization, the Company may subsequently decide to make certain modifications to the Company's products for a number of reasons including those based on customer feedback and/or in view of competitive offerings;
- a recall of the Company's products, either voluntarily or at the direction of the FDA or another governmental authority or regulatory body, or the discovery of serious safety issues with the Company's products, could have a significant adverse impact on the Company;
- compliance with accounting regulations and tax rules across multiple jurisdictions is resource intensive and expensive and could expose the Company to penalties and fines;
- contingent liabilities could have a negative impact on the Company's financial position;
- there can be no certainty that the Company will meet the Company's established product development and commercialization milestones, and failure to do so may affect the Company's operational and financial results;
- Commercial manufacturing of the Enos system is expected to be an extremely detailed and complex process with the potential for delays, interruptions, or cost overruns;
- the Company's reliance on suppliers and development firms for execution of the Company's development programs means that the Company do not control all aspects of the development;
- a product malfunction, including in any clinical studies, could result in delays, liability and negative perceptions of the Enos system and the Company;
- certain reusable instruments, camera components and other accessories require repeated cleaning and sterilization;
- as the Company is a Canadian company, it may be difficult for U.S. shareholders to effect service on the Company or to realize on judgments obtained in the U.S.;
- the Company is subject to risks related to additional regulatory burden and controls over financial reporting;
- fluctuations in foreign currency exchange rates may adversely affect the Company's financial results;
- the Company may not be able to maintain the Company's status as a "Foreign Private Issuer";

- the Company is an “emerging growth company” and cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make it less attractive to investors;
- the Company is likely a “passive foreign investment company”, which may have adverse U.S. federal income tax consequences for U.S. investors;
- the Company may face or otherwise be exposed to cyber-security risks and threats;
- the Company’s financial condition and results of operations for fiscal 2021 may be adversely affected by the global COVID-19 pandemic;
- the global COVID-19 pandemic creates substantial uncertainty as to the willingness and ability of hospitals, health maintenance organizations (HMOs), ambulatory care facilities and other prospective customers to purchase and implement robotic surgical systems; and
- material weaknesses in the Company’s internal controls over financial reporting.

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

- general business and current global economic conditions;
- future success of current research and development activities;
- achieving development milestones;
- ability to achieve product cost targets;
- competition;
- no significant changes to regulatory clearance or approval processes in the United States and Europe;
- stable tax rates and benefits;
- the availability of financing on a timely basis;
- the Company’s and competitors’ costs of production and operations;
- the Company’s ability to attract and retain skilled employees;
- the Company’s ongoing relations with its third-party service providers;
- the design of the Enos system and related platforms and equipment;
- the progress and timing of the development of the Enos system;
- costs related to the development of the Enos system;
- receipt of all applicable regulatory approvals or clearances;
- estimates and projections regarding the robotic-assisted surgery equipment industry;
- protection of the Company’s intellectual property rights;
- market acceptance of the Company’s systems under development;
- the Company’s ability to meet the continued listing standards of Nasdaq and the TSX; and
- the type of specialized skill and knowledge required to develop the Enos system and the Company’s access to such specialized skill and knowledge.

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

DEVELOPMENT OF THE BUSINESS

Three Year History

The Company's activities over the last three years have been primarily focused on product development, pre-clinical evaluation of its technology, securing intellectual property protection, and raising equity capital.

2020

Medtronic

On June 3, 2020, the Company entered into a development and license agreement (the "Development Agreement") with Covidien LP, a wholly owned subsidiary of Medtronic plc ("Medtronic") in connection with the development of robotic assisted surgical technologies and a separate license agreement (the "License Agreement") with Medtronic in respect of certain of the Company's already developed technologies.

The Development Agreement provides for the development of robotic assisted surgical technologies for use by both Titan and Medtronic in their respective businesses through the granting of certain licenses to the intellectual property developed thereunder. In addition to retaining certain rights to commercialize the developed technologies, the Company has received a US $10 million payment for the completion of Medtronic Milestone 1 and is eligible to receive additional payments totaling up to US $21 million upon the successful completion of Medtronic Milestone 3 and Medtronic Milestone 4. The payments are to be provided as technology milestones are completed and verified and are further identified in the table below. The Development Start Date was June 12, 2020.

Medtronic Milestone(1)	Deadline(2)	Payment (US$)(3)
Medtronic Milestone 1	Four (4) months from Development Start Date(4) (5)	$10,000,000
Medtronic Milestone 2(6)	Four (4) months from Development Start Date	-
Medtronic Milestone 3	Six (6) months from the later of (a) receipt by us of Payment for Medtronic Milestone 1, (b) receipt by us from Medtronic of Medtronic deliverables required for Medtronic Milestone 3, and (c) receipt by us from Medtronic of confirmation of certain due diligence in respect of our deliverables for Medtronic Milestone 1	$10,000,000
Medtronic Milestone 4	Four (4) months from the later of (a) receipt by us of Payment for Medtronic Milestone 3, (b) receipt by us of Medtronic deliverables for Medtronic Milestone 4, and (c) receipt by us from Medtronic of confirmation of certain due diligence in respect of our deliverables for Medtronic Milestone 3	$11,000,000 (7) (8)

Notes:

(1) Medtronic Milestone 1, Medtronic Milestone 3 and Medtronic Milestone 4 are each defined in the Development Agreement and consist of the completion of the development of certain robotic assisted surgical technologies as described in the Development Agreement.
(2) All as further described and qualified in the Development Agreement.
(3) Each payment is conditional upon the corresponding milestone being completed on a timely basis.
(4) "Development Start Date" has the meaning ascribed to it in the Development Agreement and as set out above.
(5) As of the date of hereof, Medtronic Milestone 1 has been achieved on schedule and payment was received.
(6) Medtronic Milestone 2 is a non-technology milestone defined as Titan raising at least US $18,000,000 of capital between the effective date of the Development Agreement and the date that is four months from the Development Start Date. Medtronic Milestone 2 was achieved ahead of the deadline in June 2020.
(7) The amount of the payment will be the sum of US $10,000,000 and the amount of certain legal, transaction and intellectual property related expenses to be paid to the Company up to a maximum of US $1,000,000 pursuant to the Development Agreement and License Agreement.
(8) The balance outstanding under the Medtronic Loan (described below) will be offset against the payment for Medtronic Milestone

The Development Agreement provides for a steering committee comprising an equal number of representatives from Titan and Medtronic be established to provide oversight regarding the work toward achievement of the milestones. Either party may terminate the agreement if the other party materially breaches the agreement and (if the breach is curable) fails to cure the breach within forty (40) business days after receipt of written notice.

Under the terms of the License Agreement, Titan granted Medtronic an exclusive license with regard to certain robotic assisted surgical technologies, including patents and know-how, for a one-time upfront royalty payment of US $10 million with no further royalty payments due thereunder. Titan has retained certain rights to the licensed technologies to continue to develop and commercialize those technologies for the Company's own business in single access robotic assisted surgery, including the Enos™ robotic single access surgical system (the "Enos system").

On April 28, 2020, Titan received gross proceeds of US $1.5 million from a senior secured loan (the "Medtronic Loan") provided by an affiliate of Medtronic ("Medtronic Lender"). The Medtronic Loan is evidenced by an amended and restated senior secured promissory note ("Note") dated June 3, 2020, in the principal amount of US $1.5 million plus an amount equal to certain legal, transaction and intellectual property related expenses incurred by Medtronic and will bear interest at the rate of 8% per annum. The unpaid principal balance owing under the Note, together with any accrued and unpaid interest and all other unpaid obligations under the Note, shall be due and payable in full on the earliest to occur of: (i) June 4, 2023, (ii) the completion of the last milestone under the Development Agreement, or (iii) a Change of Control (as defined in the Note), subject to an accelerated due date under certain adverse conditions. Until repayment of the loan, Medtronic may have one non-voting observer attend meetings of Titan's Board of Directors.

Medtronic Senior Security

In conjunction with the Medtronic Loan, Titan entered into a security agreement dated April 28, 2020 in favor of Medtronic Lender (the "Security Agreement") pursuant to which Titan has granted to Medtronic Lender a security interest in all of the Company's present and future property including all personal property, inventory, equipment and intellectual property. In addition, Medtronic Lender's rights and powers under the Security Agreement include without limitation (a) exercising and enforcing all rights and remedies of a holder of collateral as if Medtronic Lender were the absolute owner of the collateral, (b) collection of any proceeds arising in respect of all of the Company's property pledged as security for the loan, (c) license or sublicense, whether on an exclusive or nonexclusive basis, of any of the Company's intellectual property for such term and on such conditions and in such manner as Medtronic Lender in its sole judgment determines (taking into account such provisions as may be necessary to protect and preserve such intellectual property), and (d) the right to enforce its security in the event of a default which may include the appointment of a receiver by instrument or order of the court.

Regulatory

The Company has not completed any regulatory submissions for marketing authorization, including a 510(k) submission or a De Novo classification submission with the FDA. Only after receiving IDE approval and upon the successful completion of IDE clinical studies, will the Company be in a position to submit to the FDA an application for marketing authorization. Further, it is not possible to predict with certainty the outcome of any regulatory agency review upon submission and the effect of that outcome on the time required to complete activities required for regulatory approval or clearance. The Company has received written communication from the FDA that indicates the FDA believes, based on information provided to it, the Enos system is appropriate for classification through the De Novo submission pathway. The Company plans on further communications and submissions with the FDA to clarify the requirements for planned IDE clinical studies, and any additional special controls which the FDA may apply, including those that may be deemed applicable to robotically assisted surgical devices in general. In view of the FDA's recent written communication with the Company and other information available to the Company, it does not appear that the FDA will continue to allow the use of the 510(k) submission pathway for any new robotically assisted surgical devices, where device manufacturers can demonstrate that the new device is substantially equivalent to a legally marketed predicate device. Accordingly, the Company will likely proceed with a De Novo classification request, while continuing to evaluate its options for use of the 510(k) submission pathway (see "*Regulatory Overview*").

In the event the Company does proceed with a De Novo classification submission, additional resources, costs and time may be required for the Company to seek regulatory approval or clearance. Until the Company further communicates with the FDA through one or more submissions and receives feedback from the FDA, the Company cannot provide additional guidance on the regulatory process and the additional costs and time that may be involved, including whether it will ultimately proceed with a De Novo classification submission.

Offerings

Share issuance to Contract Development Firm

On January 3, 2020, a development firm engaged by the Company purchased from the Company 501,148 Common Shares at a price of $0.50 per share, and the purchase price was satisfied by way of the development firm setting off $250,574 owed by the Company to the development firm for services it had previously rendered.

March 2020 Financing

On March 25, 2020, the Company entered into definitive agreements with investors that provided for the purchase and sale of 7,000,000 Common Shares at a purchase price of $0.17 per Common Share and 3,500,000 Common Share purchase warrants (each, a "March 2020 Warrant"), resulting in total gross proceeds of approximately $1.2 million. Each March 2020 Warrant is exercisable to purchase one Common 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, which occurred on March 27, 2020. Pursuant to the placement agency agreement entered into in respect of the offering, in addition to the cash commission of $83,300, broker warrants were issued to the placement agent which entitle the holder to purchase 490,000 Common Shares at a price of $0.2125 per share prior to expiry on March 27, 2025.

May 2020 Financing

On May 6, 2020, the Company completed a registered direct offering of 5,514,504 Common Shares at an offering price of $0.36268 per Common Share and 2,757,252 unregistered Common Shares purchase warrants (each, a "May 2020 Warrant"), resulting in gross proceeds of approximately $2,000,000. Each May 2020 Warrant is exercisable to purchase one Common Share at an exercise price of $0.3002 per Common Shares for a period of five and one-half years following the date of closing of the offering. Pursuant to the placement agency agreement entered into in respect of the offering, in addition to the cash commission of $140,000, broker warrants were issued to the placement agent which entitle the holder to purchase 386,015 Common Shares at a price of $0.45335 per share prior to expiry on November 6, 2025.

June 2020 Financing

On June 10, 2020, the Company completed a registered offering of 6,500,000 Common Shares, 11,500,000 common share equivalents (each, a "June 2020 Common Share Equivalent") and 9,000,000 Common Share purchase warrants (each a "June 2020 Common Warrant") for total gross proceeds of approximately $18,000,000. The Common Shares, June 2020 Common Share Equivalents and June 2020 Common Warrants were sold in fixed combinations at an offering price of $1.00, consisting of one Common Share and one-half June 2020 Common Warrant or one June 2020 Common Share Equivalent and one-half June 2020 Common Warrant. Each June 2020 Common Warrant is exercisable to purchase one Common Share at an exercise price of $1.00 per Common Share prior to expiry on June 10, 2024. Each June 2020 Common Share Equivalent is convertible to one Common Share at a conversion price of $0.0001 and will expire when exercised in full. Pursuant to the placement agent agreement entered into in respect of the offering, in addition to the cash commission of $1,260,000, broker warrants were issued to the placement agent which entitle the holder to purchase 1,260,000 Common Shares at an exercise price of $1.25 per share prior to expiry on June 10, 2024.

Disclosure Controls and Procedures and Internal Control Over Financial Reporting

Management has designed, or caused to be designed under their supervision, the Company's disclosure controls and procedures to provide reasonable assurance that all relevant information is gathered, recorded, processed, summarized and reported to the Chair / Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO") of the Company so that appropriate decisions can be made within the time periods specified in securities legislation regarding public disclosure by the Company in its annual filings, interim filings or other documents or reports required to be filed or submitted by it under securities legislation.

Management has also designed internal controls over financial reporting ("ICFR") to provide reasonable assurance regarding the reliability of the Company's financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Because of its inherent limitations, ICFR can provide only reasonable assurance and may not prevent or detect misstatements. Further, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

The CEO and CFO evaluated the effectiveness of the Company's internal controls over financial reporting as at December 31, 2020, and identified the material weaknesses outlined below. The Company plans to address these weaknesses in 2021.

Identified Material Weaknesses

According to the Public Company Accounting Oversight Board ("PCAOB") Auditing Standard No. 5, a material weakness is a deficiency or a combination of deficiencies in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

During the preparation of its financial statements for the year ended December 31, 2020, management became aware of certain errors in the calculation of asset and liability balances and the appropriate IFRS application and disclosure required for an amendment to a contract with an external development firm. The errors were corrected in the Company's financial results for the year ended December 31, 2020.

The material weaknesses identified were:

a) the Company did not have sufficient accounting resources with relevant technical accounting skills to address issues relating to the assessment of IFRS treatment for complex accounting issues, specifically relating to a material amendment to a contract with an external development firm;
b) the Company did not have sufficient accounting resources with relevant technical accounting skills to address and review issues relating to the valuation of warrant liabilities; and
c) the Company did not sufficiently design internal controls to provide the appropriate level of oversight regarding the financial recordkeeping and review of the Company's cut-off procedures as they relate to accounts payable and valuation of supplier liabilities.

The errors identified in the calculation of asset and liability balances were all non-cash items and were corrected in the financial statements for the year ended December 31, 2020, prior to their approval by the Company's audit committee and their filing or other disclosure to the public.

Remediation Plan for the Material Weaknesses

The Company has been actively engaged in developing remediation plans to address the identified material weaknesses. The remediation efforts in process or expected to be implemented include the following:

a) engagement of one or more qualified and independent consulting firms with subject matter experts to assist with the Company's internal accounting and reporting over complex accounting issues;
b) institution of business systems to support the work associated with the valuation and reporting of the warrant liabilities and other equity-based securities; and
c) engagement of an external consulting firm to assist with increasing the Company's in-house resources to increase the number of qualified personnel involved in financial accounting and reporting.

Despite the material weaknesses, after adjusting the financial statements of the Company as at and for the year ended December 31, 2020 prior to their approval by the Company's audit committee, and their filing in compliance with securities regulations or other public disclosure, the Company has concluded that the audited consolidated financial statements as at and for the year ended December 31, 2020, will present fairly, in all material respects, the Company's financial position, results of operations, changes in equity and cash flows in accordance with IFRS.

As the Company continues to evaluate and work to improve its internal controls over financial reporting, the Company may determine to take additional measures to address the material weaknesses or determine to supplement or modify certain of the remediation measures described above.

Relationship with Product Development Supplier

On April 30, 2020, the Company reached an agreement with one of the product development firms (the "Supplier") engaged by the Company for the payment of outstanding payables to be settled in full by the end of 2020. On October 13, 2020, the Company entered into a second agreement with the Supplier, pursuant to which the Supplier extended the time for payment of the outstanding amounts owed by the Company to the end of the first quarter of 2021. Pursuant to the second agreement, the Company paid a monthly amount of $250,000 from October through December 2020, a lump sum payment of $2,299,682 in December 2020, and monthly amounts of $750,000 in each of January, February and March 2021 to the full satisfaction of the outstanding amounts owed.

Nasdaq

On June 18, 2020, the Company received notification from Nasdaq that the Company had cured the bid price deficiency and compliance with the minimum Market Value of Listed Securities ("MVLS") of $35 million requirement as indicated in a notice received from Nasdaq on November 27, 2019 and had regained full compliance with all applicable criteria for continued listing and trading on Nasdaq. On August 5, 2020, the Company received notification from Nasdaq that, based on the closing bid price of its Common Shares for the last 30 consecutive business days, it was not in compliance with the requirement to maintain a minimum bid price of $1.00 per share. On December 24, 2020, the Company received notification from Nasdaq that the Company had cured the bid price deficiency and had regained full compliance with all applicable criteria for continued listing and trading on Nasdaq.

Naglreiter Settlement Agreement

On June 8, 2020, the Company entered into a settlement agreement with Naglreiter Consulting, LLC ("Naglreiter") to settle claims in a lawsuit pending in the United States District Court for the Southern District of Florida. Under the terms of the settlement agreement, the Company paid Naglreiter the sum of $1,050,000 and Naglreiter returned to the Company certain personal property and related electronic data in its possession, and the pending litigation was dismissed. The Company recognized a gain on settlement of $1,839,626 in the year.

Branding Initiative

On September 21, 2020, the Company announced the launch of a new name and brand identity for its robotic surgical system under development, the Enos robotic single access surgical system, gradually transitioning to the new brand identity, including on its website and in presentations and other corporate material. Along with the change to the identity of its surgical system, the Company transitioned to an updated corporate brand identity that, while retaining the Titan Medical name, complements the Enos system.

Office Lease

On October 16, 2020, Titan USA entered into a lease amending agreement to lease certain office space in Chapel Hill, North Carolina. The term of the amended lease is 55 months, and the average base monthly rent is $10,628. Upon commencement of the lease on November 1, 2020, the Company recognized a right of use asset and a lease liability as required under IFRS 16.

New Chief Financial Officer

Monique L. Delorme of Toronto, Ontario was appointed Chief Financial Officer of the Company on September 30, 2020. Ms. Delorme previously held the positions of Vice President Finance and Controller with the Company. Prior to her work with Titan, she was the Chief Financial Officer of Northern Sphere Mining Corp. ("Northern Sphere") and the Chief Financial Officer of Zonetail Inc. Ms. Delorme owns 38,833 Common Shares, representing 0.04% of the Company's issued and outstanding Common Shares.

On May 6, 2019, while Ms. Delorme served as Chief Financial Officer of Northern Sphere, the company was the subject of a cease trade order in connection with its failure to file annual financial statements and related management discussion and analysis. The order is still in effect.

2019

Relationships with Suppliers

In the later part of 2019, due to insufficient capital, the Company was unable to pay certain required deposits to its Supplier and to pay accounts payable past due on certain larger accounts.

On October 3, 2019, the Company and the Supplier entered into a letter agreement providing that until the Company secured sufficient financing, the requirement that the Company maintain a deposit with the supplier would be temporarily waived. Instead, the Company would pre-pay for any 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.

On October 4, 2019, the Company received a demand letter from Naglreiter, another service provider engaged by the Company, demanding payment for all amounts it believed it was owed by the Company. On October 11, 2019, the Company, issued a response letter declining the terms of the demands set out by Naglreiter and advising Naglreiter that it was in breach of the terms of the parties' agreements and requesting that Naglreiter cease all work on behalf of the Company.

On October 16, 2019, Naglreiter filed a Complaint against the Company in the U.S. District Court for the Southern District of Florida, alleging that the Company had not paid the amounts owed under several invoices and, further, that the invoices totaled approximately $5.0 million. The Company disputed the allegations set out in the Complaint by thereafter filing an Answer, Affirmative Defenses and Counterclaim denying the allegations, asserting defenses to the Complaint, and asserting counterclaims against Naglreiter. In early 2020, Naglreiter subsequently filed an Amended Complaint against the Company, with the Company thereafter filing an Answer and Affirmative Defenses to the Amended Complaint and an Amended Counterclaim, with the Company and Naglreiter settling the dispute on June 8, 2020 as described above under "*Naglreiter Settlement Agreement*".

Withdrawal of Previously Published Milestones

On November 1, 2019, the Company announced that it was withdrawing all forward-looking statements included in its public disclosure documents with respect to the cost and timing of the development of the Enos system (referred to at the time as the SPORT surgical system) beyond the fourth quarter of 2019.

Evolution of Costs and Timelines

During the third quarter of 2019, the Company continued software development, proceeded with human factor evaluation ("HFE") studies required for supporting regulatory filings and completed its planned good laboratory ("GLP") and initial HFE studies. During the remainder of the third and fourth quarters of 2019, the Company compiled the reports associated with GLP and initial HFE studies along with design and software validation documentation. The submittal of the IDE application that had been planned for the third quarter of 2019, was deferred as the Company determined that more time would be required to implement design changes to planned system and sterile instrument interface components, software enhancements and training tools, and thereafter produce more complete design and software validation documentation.

Early Results of First Preclinical Studies

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

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

On September 25, 2017, the Company announced the completion of its first gynecologic, colorectal, and urologic single port robotic procedures using its advanced prototype robotic surgical system at the Florida Hospital Nicholson Center in Celebration, Florida. Subsequently, the Company announced surgeons having completed critical surgical tasks integral to gynecologic procedures using advanced prototypes of its robotic surgical system at Columbia University Medical Center's surgical simulation center in New York, New York and at the Institute of Image Guided Surgery at IHU Strasbourg.

On July 18, 2019, the Company announced that it had completed all planned GLP surgical procedures, consisting of simple hysterectomies performed in 10 live animals and 5 human cadavers, that it believed were necessary for its IDE application to the FDA.

Including the 15 performed GLP studies, 12 experienced robotic surgeons from three continents have performed 53 live animal studies and seven human cadaver studies with prototypes of the Enos system. The studies performed included a broad array of procedures commonly performed by gynecologic, urologic, colorectal, bariatric, and general surgeons. The surgeons who performed these studies prepared and submitted related abstracts for peer review and have presented at clinical education meetings.

Stock Options

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

Regulatory

During the third quarter of 2019, the Company's European Notified Body completed audits of the Company's quality system procedures and related documentation for ISO 13485 Certification, which was ultimately received in January 2020. In September 2020, a surveillance audit of the Company's quality system was successfully completed by the Company's Notified Body.

Offerings

March 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. ("Bloom Burton") acting as agent. 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. 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. Pursuant to the agency agreement entered into in respect of the offering, 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. These broker warrants expired on March 21, 2021.

First Aspire Agreement

On August 29, 2019, the Company announced that it had entered into a common share purchase agreement (the "Aspire Agreement") with Aspire Capital Fund, LLC ("Aspire Capital") under which Aspire Capital committed to purchase up to $35.0 million of Common Shares at the Company's request from time to time, until February 28, 2022, subject to the terms and conditions of the Aspire Agreement. On commencing the Aspire Agreement, the Company immediately sold to Aspire Capital 1,777,325 Common Shares at a price of $1.6879 per share for gross proceeds of $3.0 million and issued 639,837 Common Shares to Aspire Capital 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), 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.

November 2019 Transaction

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 a public offering of units. On November 7, 2019, the Company announced that it had determined not to proceed with the offering.

Second Aspire Agreement

On December 23, 2019, the Company entered into a common share purchase agreement (the "Second Aspire Agreement") with Aspire Capital whereby Aspire Capital committed to purchase up to $35.0 million of Common Shares, to a maximum of 9,729,777 Common Shares, at Titan's request from time to time, until June 23, 2022. On commencement of the Second Aspire Agreement, Titan issued to Aspire Capital, 973,000 Common Shares as consideration for entering into the Second Aspire Agreement. The value of the Common Shares issued of $423,440 was included in capital and offset by a fee of the same amount plus $35,122 for additional costs incurred.

Between January 3, 2020, and February 13, 2020, the Company raised an additional $2,071,930 and issued 4,408,048 Common Shares pursuant to the Second Aspire Agreement.

Under the Second Aspire Agreement, the balance remaining on Aspire Capital's commitment is 4,348,729 Common Shares (with maximum value of $32.9 million), at Titan's option and request from time to time, until June 23, 2022.

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).

2018

The results achieved by surgeons in operating prototypes in animal and cadaver studies during 2017 preliminarily validated the potential for single incision surgeries to be performed with the Enos 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 sources, 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 2018.

During 2018, the Company confirmed with the FDA, that confirmatory human data will be required for its planned regulatory submission. The performance of human surgeries with the Enos system will require an Investigational Device Exemption ("IDE") from the FDA, which must be submitted and approved in advance.

Early Feasibility

The Company has reported that surgeons have performed a wide variety of procedures using the Enos system and confirmed the preliminary feasibility of the system in those procedures. The surgeons performed 45 procedures on live porcine (unless otherwise indicated).

- Gynecological and gynecological oncology (8 procedures at Columbia University (New York City) ("Columbia University") and Florida Hospital's Nicholson Center (Celebration, Florida) ("Florida Hospital"):
    - Radical Hysterectomy with Bilateral Salpingo Oophorectomy and Bilateral Pelvic / Para-Aortic Node Dissection
    - Simple Hysterectomy with Bilateral Salpingo Oophorectomy and Bilateral Pelvic Node Dissection
    - Simple Hysterectomy with Bilateral Salpingo Oophorectomy
- Urology (19 procedures at the Institut hospitalo-universitaire (Strasbourg, France) ("IHU Strasbourg") and Florida Hospital):
    - Hemi-Nephrectomy and Partial Nephrectomy
    - Prostatectomy (Human Cadaver)
    - Pyeloplasty
    - Ureteral-Bladder Anastomosis
- General Surgery (14 procedures at IHU Strasbourg and Florida Hospital):
    - Cholecystectomy (1 Human Cadaver, 5 Live Porcine)
    - Nissen Fundoplication (1 Human Cadaver, 3 Live Porcine)
    - Esophagectomy (Human Cadaver)
    - Gastrectomy
    - Splenectomy
- Colorectal (4 procedures at Florida Hospital):
    - Colectomy
    - Low Anterior Resection

Peer-Reviewed Abstracts

The following peer-reviewed abstracts have been presented at leading conferences:

1. Multi-disciplinary applications of a new robotic platform by Barbara Seeliger, MD and Lee Swanstrom, MD (IHU Strasbourg). Accepted and presented at Society of American Gastrointestinal and Endoscopic Surgeons Meeting, Seattle, WA, April 2018.

2. Single-port prostatectomy using SPORT Surgical System by Eric Barret, MD (IMM, France). Accepted and presented at 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 Society of Robotic Surgery Meeting, Stockholm, Sweden, June 2018.

4. Feasibility of single-port partial nephrectomy using SPORT surgical system by Eric Barret, MD (IMM, 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 (IMM, France). Accepted and presented at World Congress of Endourology Meeting, Paris, France, September 2018.

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 and presented at American Association of Gynecologic Laparoscopists Global Congress, Las Vegas, NV, November 2018.

Published Manuscript

In January 2019, the Company reported that a manuscript entitled, “Enabling single-site laparoscopy: the SPORT platform” and authored by Barbara Seeliger[1] Michele Diana[1] Jelle P. Ruurda[2] Konstantinos M. Konstantinidis[3] Jacques Marescaux[1] Lee L. Swanström[1,4] was published online in *Surgical Endoscopy* on January 8, 2019.

Methods A total of 12 minimally invasive procedures were performed on six pigs (5 cholecystectomies, 3 Nissen fundoplications, 1 splenectomy and 1 hepatic pedicle dissection) and on one human cadaver (1 cholecystectomy and 1 Nissen fundoplication), by four laparoscopic surgeons. The usability of the device was assessed by means of the modified objective structured assessment of technical skills (OSATS) score that was calculated and analyzed by two independent observers on the recorded videos. Surgeon feedback and recommendations were systematically recorded.

Results All procedures were successfully completed with the Enos system. In general, surgeons reported to appreciate the intuitive interface and controls, the high-resolution 3D imaging, the dexterity of the end effectors, and the ergonomic open control platform. Some features requiring optimization were also identified. The modified OSATS score demonstrated a learning curve effect for all device-related tasks.

Conclusions A variety of abdominal procedures could be safely completed with the then current prototype of the Enos system, in a pre-clinical setting. This preliminary feasibility experience is promising and encourages further development of single-port robotically assisted surgery.

[1] IHU-Strasbourg Institute of Image-Guided Surgery, 1, place de l’Hôpital, 67091 Strasbourg Cedex, France.
[2] Department of Surgical Oncology, University Medical Center, Utrecht, Utrecht, Netherlands.
[3] Department of General, Bariatric, Laparoscopic and Robotic Surgery, Athens Medical Center, Athens, Greece.
[4] Division of GI/MIS, The Oregon Clinic, Portland, OR, USA.

Share Consolidation

On June 19, 2018 a share consolidation was effected, on the basis of 30 pre-consolidation common shares forming one post-consolidation common share, and the outstanding common shares in the capital of the Corporation were adjusted from 419,888,250 to 13,996,275. All references to Common Shares, warrants, and stock options have been updated to reflect the 1:30 share consolidation.

Offerings

On August 10, 2018, the Company completed an offering of securities whereby it sold 7,679,574 units under the offering at a price of $2.50 per unit for gross proceeds of approximately $19,198,935. Each unit consisted of one Common Share 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.

On April 10, 2018, the Company completed an offering of securities whereby it 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. Each unit consisted of one common share and one warrant, each warrant entitling the holder thereof to acquire one thirtieth ($1/30^{th}$) of one Common Share at an exercise price of CDN $0.35 and expiring April 10, 2023. On May 10, 2018, the Company announced the exercise of the over-allotment option granted to the agent in conjunction with the offering and the Company sold an additional 168,889 units at the offering price for additional gross proceeds of $1,189,856.

DESCRIPTION OF THE BUSINESS

Product Development

The Company's business consists of the design and development of robotic-assisted surgical technologies for application in MIS and is presently focused on the development of the Enos 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 ergonomic interface to the patient cart and a 3D high-definition view of the MIS procedure. The Company intends to initially pursue gynecologic surgical indications for use of its Enos system.

Development of the Enos system has 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 has positioned the Company to design a robotic surgical system intended to include the traditional advantages of robotic-assisted 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 ergonomic user interface and a patient cart facilitating the use of instruments with enhanced dexterity.

The Enos 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 an 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 of the MIS surgical site for optimal positioning of the insertion tube. Once the insertion tube is positioned in the body, it is docked to a central drive unit of the patient cart and the 3D high-definition endoscopic camera is subsequently 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 facilitate an assortment of permanent and detachable single patient use end effectors. The use of reusable (for a specific number of uses) robotic instruments that can be cleaned and sterilized between surgeries is intended to minimize the cost per procedure without compromising surgical performance. The design of the patient cart also incorporates multiple mechanical elements including a mast, a boom and wheels, allowing 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 the Enos system, the Company plans on the continued development of a robust training curriculum and post-training assessment tools for surgeons and surgical teams. The 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 an initial set of core surgical skills simulation modules customized for use with the surgeon workstation in the first phase of the comprehensive surgeon training curriculum that the Company plans for its Enos system.

The Company continuously evaluates its technologies under development for intellectual property protection through a combination of trade secrets and patent application filings. The Company has focused on the filing and prosecution of patents that management believes validate the novelty of its unique technology, and in turn, support the value of the entire franchise.

Regulatory

The Company has used a combination of internal and external resources, including specialized product development firms, to execute the research, development and regulatory plans for the Enos system. Development objectives have been established to support a planned regulatory submission to the FDA for marketing authorization in the U.S., and submittal of a Technical File to a European Notified Body to obtain CE marking, which indicates that a product for sale within the European Economic Area has been assessed to conform to health safety and environmental protection requirements.

In the U.S., the regulatory clearance process includes a Q-Submission (Q-Sub) Program that provides companies an opportunity to interact with and obtain feedback from the FDA on specific aspects of the regulatory process, requirements and planned submissions including IDE applications, 510(k) applications and De Novo classification requests. Certain Q-Submissions, termed Pre-Submissions (Pre-Subs), typically include a request for written feedback, and if a company chooses, a meeting in which additional feedback and findings are documented in meeting minutes. The recommendations made by the FDA in response to a Pre-Submission are non-binding on the FDA, and circumstances related to a company's product or potential risks identified through post-market surveillance of similar products in clinical use may further change the position of the FDA. Furthermore, while the FDA encourages Q-Submissions, there is no assurance that feedback provided from these communications will result in regulatory approval or clearance, nor does it preclude any identified future changes in regulatory pathways.

The Company has established its plans for development and commercialization based on its expectation that the Enos system will be classified as a Class II device and therefore obtain marketing authorization through (i) a premarket notification submitted in accordance with section 510(k) of the U.S. Federal Food, Drug and Cosmetic Act (the "FD&C Act"), commonly known as a 510(k) submission, or (ii) a classification request for novel devices in accordance with section 513(f)(2) of the FD&C Act, commonly known as a De Novo classification submission. While the Company has previously confirmed with the FDA that the Enos system would be suitable for marketing authorization through a 510(k) submission, it recently obtained the Written Response from the FDA to its Request for Information in accordance with section 513(g) of the FD&C Act that indicates the FDA believes, based on information provided to it, that the Enos system is appropriate for classification through the De Novo submission pathway.

Requests for Information made pursuant to Section 513(g) of the FD&C Act require the FDA to provide information about the classification and the regulatory requirements that may be applicable to a particular device. FDA responses to such requests represent the FDA's best judgment about how a device would be regulated, based upon review of information provided by a requester, including the description of the device and its intended use. The FDA's response to a 513(g) request is not a classification decision for a device and does not constitute FDA clearance or approval for commercial distribution. Classification decisions and clearance or approval for marketing require submissions under different sections of the FD&C Act, such as a classification obtained in response to a 510(k) submission or a De Novo submission.

The Company filed the Request for Information in response to communications the Company had with the FDA in which the FDA raised the question of whether RASD, would generally continue to be eligible for classification as Class II devices and the 510(k) submission pathway, or whether De Novo submissions would be more appropriate for such devices. In view of the FDA's Written Response and other information currently available to the Company, the Company will likely proceed with a De Novo classification request for the Enos system, while continuing to evaluate its options for use of the 510(k) submission pathway. If the Company ultimately determines that the 510(k) submission pathway is not available to the Company or would otherwise present other difficulties, the Company intends to continue with the De Novo classification process.

The De Novo classification request provides a pathway for the FDA to classify novel medical devices for which general controls, or general and special controls, provide a reasonable assurance of safety and effectiveness, but for which there is no legally marketed predicate device. The De Novo process allows the FDA to review a company's submission and reasons as to why the device should be a Class II device, including the review of the general and special controls that would provide reasonable assurance of the safety and effectiveness of the device. Included in such a classification request, clinical, non-clinical, test and design data may be provided to support a company's recommendation for the classification of the device as a Class II device. After the FDA receives and reviews a request, a determination (generally within 150 days) is made to either grant or decline the request. If the request is granted, (i.e. the device is determined to be a Class II device), the device is authorized to be marketed and a new classification regulation will be established, ultimately allowing the novel device to serve as a predicate for 510(k) submissions of future devices of the same type. Should the De Novo classification request be declined, and the device is therefore classified as a Class III device, a premarket approval application under section 515 of the FD&C Act, also known as a PMA, would be required to market the device, involving a more expensive and time-consuming approval process.

Since the Enos system is presently under development and the Company has not submitted any regulatory applications, it is not possible to predict with certainty the outcome of any review by the FDA and the time required to complete activities necessary for regulatory approval or clearance is not quantifiable at this time. Accordingly, the Company plans on further communications and submissions with the FDA to clarify the requirements for the IDE clinical study protocol and to understand any special controls which the FDA may apply. The FDA's most recent review and response to the Company's proposed IDE clinical study general design and planning occurred in December 2018. Additional Pre-Submissions would allow the FDA to review the state of the current design of the surgical system, and the inclusion of test data and more detailed proposals for one or more clinical protocols would allow the FDA to provide additional feedback and/or suggest modifications.

The performance of human surgeries as part of the proposed clinical study with the Enos 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. Application to the IRB of each hospital can be made once the FDA has approved the Company's IDE application. Only upon successful completion of the IDE clinical study will the Company be in a position to submit to the FDA an application for marketing authorization.

Previous results achieved by surgeons in operating prototypes in animal and cadaver studies have preliminarily validated the potential for single incision surgeries to be performed with the Enos system. Insights gained from these preclinical studies have directed the Company to make product improvements. In June 2019, the Company commenced preclinical live animal and cadaver studies according to Good Laboratory Practice ("GLP") for FDA submittal and subsequently, on July 18, 2019, announced the successful completion of GLP surgical procedures necessary for the planned IDE application to the FDA. Following the completion of the GLP procedures, the Company proceeded to complete HFE studies, which included verification of production system operation with clinical experts under rigorous formal (summative) HFE studies under simulated robotic manipulation exercises.

Development Plan

Notwithstanding the preclinical successes achieved in 2019, during the second half of 2019, the Company experienced a severe cash shortfall and as a result, suspended all development work on the Enos system. Following a series of successful capital raises in the first half of 2020, the Company resumed product development and moved to enhance its internal development program through Titan USA.

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, actual costs and development times will exceed those published by the Company in its continuous disclosure documents in years prior to 2020. An estimate of the future costs of the development milestones and regulatory phases for the Enos system beyond the year 2022 is not possible at this time.

The Company's estimates of the costs and timelines for the development milestones of its Enos system through the fourth quarter of 2022 are as set out in the table below:

Milestone Number	*Development Milestones*	*Estimated Cost (US million $)[1]*	*Schedule for Milestone Completion*	*Comments*
Milestone 1[4]	Design, prototype and test improvements to instruments, cameras and CDU	3.2	Q4 2020	Completed
Milestone 2[4]	Launch rebranded product line including logos with trademark pending, literature and presentation templates and new website	0.3	Q4 2020	Completed
Milestone 3[4]	Iterate electromechanical design, update sterile adaptors and drape	5.2	Q1 2021	Completed
Milestone 4[4]	Perform additional software development and test system performance	5.4	Q1-Q2 2021	-
Milestone 5[4]	Perform animal lab assessment	0.1	Q2 2021	-
Milestone 6[4]	Perform biocompatibility testing of instruments, camera systems and accessories at independent lab	3.8	Q2 2021	-
Milestone 7[4]	Perform electrical safety testing for surgeon workstations and patient cart, including electromagnetic compatibility (EMC) and electromagnetic interference (EMI) tests at independent lab	2.7	Q3 2021	-
Milestone 8[4]	Perform animal feasibility or GLP study	2.8	Q3 2021	-
Milestone 9[2]	Complete initial build of Enos system IDE units	10.2	Q4 2021	-
Milestone 10[2][4]	Complete system verification testing	3.3	Q4 2021	-
Milestone 11[2][4]	Complete HFE summative testing	1.9	Q4 2021	-
Milestone 12	Update application for IDE as additional testing lab data is received and continue preparation for human confirmatory studies	6.0	Q1 2022	-

Milestone Number	*Development Milestones*	*Estimated Cost (US million $)[1]*	*Schedule for Milestone Completion*	*Comments*
Milestone 13	Submit IDE application to FDA	6.0	Q1 2022	-
Milestone 14	Complete secondary build of Enos system IDE units			
Milestone 15	Initiate IDE clinical study	19.0	Q2-Q4 2022	-
Milestone 16	Complete IDE clinical study, data analysis and final report			
Milestone 17[3]	Submit application for FDA marketing authorization	TBD	TBD[5]	-
Milestone 18	Tentative FDA marketing authorization letter	TBD	TBD	-

Notes:

(1) The estimated costs above include an allocation of US $1.8-2.8 million per quarter of general and administrative costs.

(2) Milestones 9, 10 and 11 are expected to be executed during the fourth quarter of 2021 with their projected completion in December 2021. If the Company achieves Medtronic Milestones 3 and 4, it will be entitled to receive the corresponding payments from Medtronic of US $10 million and US $11 million, respectively, and, in those circumstances the Company estimates that it will have sufficient funds for the execution and completion of Milestones 9, 10 and 11. If the Company does not achieve Medtronic Milestones 3 and 4, the Company will need to raise additional capital to complete Milestones 9, 10 and 11.

(3) The Company plans to submit its application for FDA marketing authorization at a future date, after successful completion of IDE clinical studies and following further correspondence with the FDA as described in the section titled “Description of the Business – Regulatory”.

(4) The costs of Milestones 1 through 11 are forecasted to total US $38.9 million, a net increase of US $1.6 million from amounts previously forecasted and published in the Company’s Management Discussion and Analysis dated November 16, 2020. The increase is primarily related to general and administrative costs, enhancing internal R&D capabilities and other general R&D related costs.

Due to the nature of technology research and development, there is no assurance that the milestones set forth in the table above and discussed in this short form prospectus will be achieved, and there can be no assurance with respect to the time or resources that may be required to achieve them. The Company expects that additional specific milestones could be identified in the course of the development of its robotic surgical system, and existing milestones, budgets and the schedule for completion of each milestone may change depending on a number of factors including the results of the Company’s development program, clarification of or changes to regulatory requirements, the availability of financing and the ability of development firms engaged by the Company to complete work assigned to them.

Intellectual Property and Licensing

The Company’s patent portfolio has expanded from 12 issued patents at December 31, 2016 to 68 issued patents and 83 patent applications as of December 31, 2020. 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.

Pursuant to the License Agreement with Medtronic, the Company has exclusively licensed a portion of its portfolio to Medtronic, while retaining the world-wide rights to commercialize the licensed technologies for the Company's own business in single access robotic assisted surgery, including the Enos system. Furthermore, pursuant to the Development Agreement with Medtronic, the Company will develop certain robotic assisted surgery technologies, that if successfully completed and verified, will be exclusively licensed by Medtronic for certain license payments. The Company will retain the world-wide rights to commercialize the developed technology in its own business, including for use with the Enos system. See above "*Medtronic*" under "*Development of the Business*".

Operations

The Company maintains its head office at subleased premises in Toronto, Ontario, Canada and Titan USA performs work on both the Enos system and work pursuant to the Medtronic Development Agreement and License Agreement from the Chapel Hill, North Carolina facility. In addition to Titan USA employees, the Company engages subcontractors and consultants to perform design and development, prototyping and manufacturing.

Employees

As of December 31, 2020, the Company had a total of 15 full-time employees, 2 are located in the Toronto office and the other 13 are located in the U.S.

RISK FACTORS

Investing in the Company's securities involves a high degree of risk. Before making an investment decision with respect to the Company's securities, potential investors should carefully consider the following risk factors, in addition to the other information included or incorporated by reference into this annual information form, as well as the Company's historical financial statements and related notes. The risks set out below are not the only risks that the Company faces, however management has identified the risks below as specific risks to the Company. If any of the following risks materialize, the Company's business, financial condition, prospects, or results of operations will likely suffer. In that case, the trading price of the Company's Common Shares and warrants could decline, and an investor may lose all or part of the money paid to buy the Company's securities.

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

The Company will require additional financing in order to continue its research and development program through to completion and take advantage of future opportunities. Titan's ability to arrange such financing in the future will depend in part upon prevailing capital market conditions, as well as upon its business success. There can be no assurance that the Company will be successful in its 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, the Company's control may change, and shareholders may suffer additional dilution. If additional funds are raised through strategic partnerships, the Company may be required to relinquish rights to its 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, the Company may not be able to take advantage of opportunities, or otherwise respond to competitive pressures, which may delay or reduce its operations and ability to remain in business and continue as a going concern.

The Company has a history of losses and there is no guarantee that Titan will be able to achieve profitability.

Titan has a history of losses, and there is no assurance that any of its contemplated products will generate sustainable revenues or earnings, be profitable or provide a return on investment in the future. The Company has not paid dividends in the past. The Company's directors will determine its future dividend policy if Titan generates earnings in the future, based on operational and financial circumstances at that time.

The Company had negative cash flow from operating activities for its fiscal year ended December 31, 2020 and this negative cash flow is expected to continue. The Company will continue to incur research and development and general and administrative expenses related to its operations. The Company expects to incur sales and marketing expenses in anticipation of the commercialization of the single-port robotic surgical system if and when FDA marketing authorization and CE marking provides authorization for commercial activities in the corresponding jurisdictions. If the Enos system fails in development or does not gain regulatory clearance or approval, or if it does not achieve market acceptance, may never generate revenue or free cash flow or become profitable. Even if the Company generates revenue or free cash flow or achieve profitability in the future, Titan 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 its business development and marketing activities. If Titan does not have sufficient capital to fund its operations, the Company may be required to reduce its research and development efforts or in the future reduce its marketing efforts or forego certain business opportunities.

The Company relies on contractual arrangements and there can be no assurance that these arrangements will achieve their goals.

The Company relies upon, and expect to rely upon, contractual arrangements with manufacturers (if and when its technology is commercialized) and medical technology development firms for the assistance in product design and development, and manufacturing (including manufacturing for the purposes of IDE clinical studies). There can be no assurance that the strategic alliances will achieve their goals.

The Company depends on key personnel and the loss of the service of such personnel could have a negative impact on its business.

Titan's 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 its management, its operations and business prospects could be adversely affected. In particular, the losses of the services of any of its senior management or other key employees integral to the development of its 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 its business, financial condition, prospects, operating results and cash flows. The Company does not currently maintain "key man" insurance for any senior management or other key personnel.

The Company expects to increase the size of its management team in the future and its failure to attract and retain new members of its management team could adversely affect its business.

The Company expects that its potential expansion into areas and activities requiring additional expertise, such as manufacturing, sales, marketing and distribution will place additional requirements on its management, operational and financial resources. The Company expects 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 its business, financial condition and results of operations.

The Company's trade secrets or other confidential information may be compromised.

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

The Company relies on third parties for a number of important aspects of its business and there are a range of issues that are outside of its direct control.

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

The Company relies 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 the Company expects to continue to do so in the future. The Company relies heavily on these parties, but do not control many aspects of their activities. As a result, many important aspects of product development are outside its 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 its products may be extended, delayed or terminated or may need to be repeated, and the Company may not be able to obtain regulatory clearance.

Titan's industry is highly competitive, and a number of its competitors have significantly greater financial and human resources than Titan does.

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. The Company's market is dominated by larger and better capitalized companies with substantially greater resources than the Company has. New products may be slow to be accepted into the market or may not be accepted at all. The Company is constantly exposed to the risk that its competitors may implement new technology before Titan does, or may offer lower prices, additional products or services or other incentives that Titan cannot and will not offer. The Company can give no assurances that the Company will be able to compete successfully against existing or future competitors. Competition in its target market is intense, and the Company expects 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 the Company hopes to sell its products.

The Company's ability to compete successfully depends on a number of factors, including:

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

Titan's commercial success depends significantly on its ability to operate without infringing the patents and other proprietary rights of third parties.

The Company's 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 its technology or proposed products, obtain licenses, or cease certain activities. The Company may become subject to claims by third parties that its 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. The Company may become subject to these claims either directly by the third parties, or through indemnities against these claims that the Company 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 its proprietary rights. Some of the Company's 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 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 the Company obtains licenses from a third parties. There can be no assurance that the Company would be able to obtain any such licenses on commercially favorable terms or at all. If the Company does not obtain such licenses, the Company could be required to cease the development and sale of certain of its products.

If the Company is unable to obtain and enforce its patent rights, the Company's 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 its commercially valuable technology. The scope of protection, if any, that may be afforded by its patent applications is uncertain. Further, even if patents issue from its pending or future applications, those issued patents and any of its 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.

The Company's success will depend, in part, on its ability to obtain and maintain protection over its 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 its technology without authorization. There can be no assurance that any steps taken by us will prevent misappropriation of its technology. Litigation could result in substantial costs and diversion of resources and could have a material adverse effect on the Company's business, operating results and/or financial condition.

The Company has licensed a portion of its intellectual property portfolio to Medtronic. In the event the Company wanted to enforce its rights with respect to this intellectual property against a third party, it would need to seek Medtronic's permission.

Pursuant to the License Agreement, the Company has granted an exclusive license to a portion of its intellectual property to Medtronic while retaining the world-wide rights to commercialize the licensed technologies for the Company's own business in single access robotic assisted surgery, including the Enos system. If a third party infringed on any of the intellectual property covered by the License Agreement and subject to Medtronic's exclusive license, the Company would need to obtain Medtronic's permission before enforcing Titan's rights against this third party. There can be no guarantee that Medtronic would give permission for such enforcement on a timely basis or at all.

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

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

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

Certain of Titan's 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. The Company's directors will be required by law to act honestly and in good faith with a view to its best interests and to disclose any interest which they may have in any of its projects or opportunities. If a conflict arises at a meeting of the Company's 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 the Company 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 the Company may be exposed, along with its financial position at that time.

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

The Company's financial results may vary significantly from period to period depending on the level of development activities and the size, frequency, and timing of its securities offerings. The financial results may fluctuate because of a number of factors that may be outside of the Company's control, which may cause the market price of its Common Shares to fall. For these reasons, comparing Titan's 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.

The Company's 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 its 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 its 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.

The Company is targeting a rapidly evolving robotic assisted surgical device market. It is not clear that surgeons or hospitals will choose the Enos system over those offered by its competitors.

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

There is no assurance that surgeons or hospitals will choose Titan's surgical system (if and when it is commercialized) over the systems offered by its 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 and/or new entrants to the market could impact Titan's operating and financial results.

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

The Company may become subject to potential product liability claims, and the Company may be required to pay damages that exceed its insurance coverage.

The Company's 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 the Company currently has 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 Titan may elect not to insure against such liabilities due to high premium costs or other reasons, in which event the Company could incur significant costs that could have a materially adverse effect upon its financial position.

Titan's business exposes us to potential product liability claims that are inherent in the design, testing, manufacture, sale and distribution of the Enos system which Titan is 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 Titan's product liability insurance rates or in its inability to secure coverage in the future on commercially reasonable terms, if at all. In addition, if Titan's product liability insurance proves to be inadequate to pay a damage award, the Company may have to pay the excess of this award out of its cash reserves, which could significantly harm its financial condition. If longer-term patient results and experience indicate that its products or any component of a product causes tissue damage, motor impairment or other adverse effects, the Company could be subject to significant liability. A product liability claim, even one without merit, could harm Titan's reputation in the industry, lead to significant legal fees, and result in the diversion of management's attention from managing its business.

Titan's technology may depend on third party licenses for certain functions or procedures. There can be no guarantee that the Company will be able to secure and maintain those licenses.

Titan's 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. The Company may need to obtain one or more licenses to use those other existing technologies. If the Company is unable to obtain licenses on reasonable commercial terms from the holders of such intellectual property rights, the Company could be required to halt development and manufacturing or redesign its technology, failing which the Company could bear a substantial risk of litigation for infringement or misappropriation of such intellectual property rights. In any such event, the Company's business and operations could be materially adversely affected.

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

The preclinical and clinical testing, manufacturing, sale and distribution of its contemplated products are governed by a number of regulatory bodies in countries where the Company intends to conduct business, including required clearance to market from the FDA, European CE mark approval, and approval from Health Canada. 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 the Company 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 Titan's 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 demonstrate that (i) general controls or general and special controls are adequate to provide reasonable assurance of safety and effectiveness, and (ii) the probable benefits of the device outweigh the probable risks, each in the case of a De Novo classification request;
- 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 its processes or facilities or those of any of its 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 the Company's 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 the Company's ability to commercialize its products and its results of operations and financial condition.

Titan's 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. The Company's results may be affected by social and economic conditions which impact its operations.

Once the Company's products are cleared or approved, modifications to its 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 the Company is granted FDA marketing authorization, the Company may subsequently decide to make certain modifications to its products for a number of reasons including those based on customer feedback and/or in view of competitive offerings.

Any modification to a regulatory cleared, approved or authorized 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 clearance, approval or authorization. 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 the Company's decisions regarding whether new clearances, approvals or authorizations are necessary. If the FDA disagrees with the Company's determinations for any future changes, or prior changes to previously marketed products, as the case may be, the Company may be required to cease marketing or to recall the modified products until the Company obtains clearance, approval or authorization, and the Company may be subject to significant regulatory fines or penalties.

Furthermore, the FDA's ongoing review of regulatory programs may make it more difficult for us to make modifications to the Company's products, either by imposing more strict requirements on when a new regulatory application for a modification to a previously marketed product must be submitted, or applying more onerous review criteria to such submissions.

Even after clearance, approval or authorization for Titan's products is obtained, the Company is subject to extensive post-market regulation by the FDA and other regulatory authorities. The Company's failure to meet strict regulatory requirements could require us to pay fines, incur other costs or even close Titan's facilities.

Even after the Company has obtained the proper regulatory clearance, approval or authorization 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, approval or authorization 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 the Company's products and adversely affect its reputation and the perceived safety and efficacy of its products.

The Company is 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 its 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 Titan's costs and the price of its products. Later discovery of previously unknown problems with the Company's 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 product(s) from the market; voluntary or mandatory recalls; a requirement to repair, replace or refund the cost of any medical device the Company manufactures or distributes; fines; suspension of regulatory clearances, approvals or authorizations; product seizures; injunctions or the imposition of civil or criminal penalties which would adversely affect the Company's business, operating results and prospects.

If one of the Company's products, or a malfunction of one of its products, causes or contributes to a death or a serious injury, the Company 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, the Company is required to report to the FDA any incident in which its product(s) may have caused or contributed to a death or serious injury or in which its product(s) 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 the Company's ability to manufacture its products in a cost-effective and timely manner, and have an adverse effect on its reputation, results of operations and financial condition. The Company is 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 Titan's 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 the Company's time and capital, distract management from operating its business and may harm its reputation and financial results.

A recall of the Company's products, either voluntarily or at the direction of the FDA or another governmental authority or regulatory body, or the discovery of serious safety issues with its 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 Titan's 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 the Company's products would divert managerial and financial resources and could have an adverse effect on its reputation, results of operations and financial condition, which could impair its ability to produce its products in a cost-effective and timely manner in order to meet its customers' demands. The Company may also be required to bear other costs or take other actions that may have a negative impact on its future sales and its ability to generate profits.

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

The Company is 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 its financial results or the manner in which the Company conducts business. Titan has issued its financial statements for the year ended December 31, 2020 in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

In the future, the geographic scope of the Company's 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 Titan were to inadvertently fail to comply. In the event the Company were to inadvertently fail to comply with applicable tax laws, this could have a material adverse effect on its business, results of operations, and financial condition.

Contingent liabilities could have a negative impact on the Company's financial position.

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

A lengthy and uncertain sales cycle could have a negative impact on the Company's operating results.

The sales cycle for the Company's 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 its operating results.

The purchase of a surgical robotic system such as the Company's Enos system represents a capital purchase by hospitals and other potential customers. The capital purchase nature of the transaction, the complexity of Titan's 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 the Enos system. The Company 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. The Company may face difficulty identifying and establishing contact with such decision makers. Even after initial acceptance, the negotiation and documentation processes can be lengthy. Additionally, the Company's 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 the Company's operating results to fall below expectations. The Company also expects 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.

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

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

The Company has established product development and commercialization milestones that the Company uses to assess its 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, Titan tests and evaluates its technology, including under simulated conditions. If such evaluations indicate technical defects or failure to meet cost or performance goals, the commercialization schedule could be delayed, and potential purchasers of its initial commercial systems may decline to purchase them or they may choose to purchase alternative technologies. Whether or not the Company meets its milestones, there is no assurance that its technology will be successful in the market. The Company expects that additional specific milestones could be identified as the development of the Enos 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 its development program, the availability of financing and the ability of development firms engaged by us to complete work assigned to them.

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

Titan's future success is substantially dependent on a continued research and development effort that has thus far been directed by certain of its 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 the Company's 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 the Company's research and development activities may not result in a functional, commercially viable product or one that is approved by regulatory authorities.

Commercial manufacturing of the Enos 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, Titan 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, the Company cannot be certain that its manufacturers will be able to complete the manufacture of prototypes or fill its orders for commercial products, once commercialized, in a timely manner. If the Company experiences 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 the Company is able to expand existing manufacturing or find new manufacturing, the Company may encounter delays in production. Any delays, interruption or increased costs in the supply of materials or manufacture of the Company's products could have an adverse effect on its ability to meet customer demand for its products and result in lower revenues and net income.

The Company's reliance on suppliers and development firms for execution of its development programs means that the Company does not control all aspects of the development.

The Company relies on suppliers and development firms to conduct aspects of its technology research, development and manufacturing. If these 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 the Company is unable to satisfy those conditions or they do not otherwise perform as contractually required or expected, the Company may not be able to complete the development of the Enos system, or the Company may be delayed in doing so, and the costs for developing its products may significantly increase beyond those forecasted. In the event that development firms do not carry on the development work on aspects of the Enos system, on conditions and in a manner that is agreeable to us, the Company 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.

The Company relies on external parties for successful execution of development programs, but do not control many aspects of their activities. As a result, many important aspects (including costs and timing) of product development are outside its direct control.

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

Additionally, if 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 the Company's study protocols or otherwise fail to generate reliable preclinical or clinical data, development, market authorization and commercialization of its products may be extended, delayed or terminated or may need to be repeated, costs may significantly increase and the Company may not be able to obtain regulatory clearances within the time frames forecasted, if at all.

A product malfunction, including in any clinical study, could result in delays, liability and negative perceptions of the Enos system and ourselves.

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

If the Company's contemplated products are found to be defective, the Company 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 the Company's reputation and the Enos system, which could adversely impact its 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 the Company's 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, Titan's economic model for pricing of reusable devices could become impractical to implement, its potential profit margins (if any) may be adversely affected, or its product offering could be deemed to not be viable for commercial use.

Once the Company's products are available for commercial use, there is no assurance that customers will follow the cleaning and sterilization procedures that the Company recommends for its products. Failure by a customer to perform the appropriate cleaning and sterilization procedures could lead to patient injury or death, in which case the Company 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 its business.

As the Company is a Canadian company, it may be difficult for U.S. shareholders to effect service on us or to realize on judgments obtained in the U.S.

The Company is incorporated under the laws of the Province of Ontario, Canada, a number of its directors and officers are residents of Canada, and most or all of its 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.

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

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

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

Fluctuations in foreign currency exchange rates may adversely affect Titan's financial results.

The Company conducts operations principally in the U.S. and Canada, and portions of its expenses, assets and liabilities are denominated in U.S. dollars and Canadian dollars. Since the Company's consolidated financial statements are presented in U.S. dollars, the Company must translate its 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. The Company has not historically hedged its exposure to foreign currency fluctuations. Accordingly, increases or decreases in the value of the Canadian dollar against the U.S. dollar could affect its operating losses and the value of balance sheet items denominated in foreign currencies.

The Company may not be able to maintain its status as a "Foreign Private Issuer".

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

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

The Company is an "emerging growth company" as defined in the JOBS Act. The Company will continue to qualify as an "emerging growth company" until the earliest to occur of: (a) the last day of the fiscal year during which the Company had total annual gross revenues of US$1,070,000,000 or more; (b) the last day of its fiscal year following the fifth anniversary of the date of the first sale of its 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 the Company is deemed to be a 'large accelerated filer.'

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

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

Titan believes it was classified as a ''passive foreign investment company'' or ''PFIC'' during the tax year ended December 31, 2020, and based on current business plans and financial expectations, the Company expects that it may be a PFIC for the current tax year and future tax years. If the Company is a PFIC for any year during a U.S. taxpayer's holding period of Common Shares, 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 its net capital gain and ordinary earnings for any year in which the Company is a PFIC, whether or not the Company distributes any amounts to its shareholders. However, U.S. taxpayers should be aware that there can be no assurance that Titan will satisfy the record keeping requirements that apply to a qualified electing fund, or that the Company will supply U.S. taxpayers with information that such U.S. taxpayers require to report under the QEF Election rules, in the event that the Company is a PFIC and a U.S. taxpayer wishes to make a QEF Election. Thus, U.S. taxpayers may not be able to make a QEF Election with respect to their Common Shares. A U.S. taxpayer who makes the Mark-to-Market Election generally must include as ordinary income each year the excess of the fair market value of the Common Shares 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 or otherwise be exposed to 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 its business, financial and other systems or those of the companies, service providers or consultants with which Titan does 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.

The Company's financial condition and results of operations for fiscal 2021 may be adversely affected by the global COVID-19 pandemic.

Since December 31, 2019, the outbreak of a 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, along with the uncertainty around the disease itself, have caused material disruption to business globally resulting in an economic slowdown. Global equity markets have experienced significant volatility. 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. Due to the uncertainty caused by the COVID-19 outbreak, the Company is experiencing a longer recruitment cycle for recruiting technical personnel, and travel restrictions have slowed its ability to select and qualify suppliers for certain of its products. Furthermore, contractors and suppliers engaged by the Company may also be impacted by COVID-19 and there is a risk they could fail to meet their obligations to the Company. The effects of these impediments on the Company's ability to achieve its milestones, including the timeline for completion, is unknown at this time.

The global COVID-19 pandemic creates substantial uncertainty as to the willingness and ability of hospitals, health maintenance organizations (HMOs), ambulatory care facilities and other prospective customers to purchase and implement robotic surgical systems.

The ultimate impact of the COVID-19 pandemic on the Company's future sales of the Enos system (once all necessary regulatory approvals, clearances or authorizations are obtained) is unknown. While elective procedures were minimized, postponed or canceled in the early stages of the COVID-19 pandemic to allow hospitals to divert resources in responding to the COVID-19 pandemic, some elective procedures have resumed. Whether, and how long it takes, to ultimately return to procedure levels prior to the COVID-19 pandemic is unknown. Any sustained slowdown in elective robotic assisted surgical procedures may result in a substantial negative impact on the market prospects for robotic assisted surgical systems, instruments, accessories and related services.

Accordingly, COVID-19 may have a material adverse effect on numerous aspects of the Company's business, including:

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

Material weaknesses in the Company's internal controls over financial reporting may adversely affect the accuracy and reliability of its financial statements.

The Company identified material weaknesses in its ICFR in the course of the preparation of its financial statements in respect of the fiscal year ended December 31, 2020 prior to the approval of the financial statements by the Company's audit committee and board or directors and prior to their filing or other public disclosure. If the Company fails to maintain effective ICFR, this may adversely affect the accuracy and reliability of its financial statements and it could impact its reputation, business and the price of the Common Shares, as well as lead to a loss of investor confidence.

The Company has concluded that, as of December 31, 2020, the Company's ICFR was not effective due to the material weaknesses. The Company experienced significant and rapid change during the 2020 fiscal year as a result of the establishment of a new research and development facility, the augmentation of its development team, new arrangements with external development firms and the transition arising from the retirement of the Company's former Chief Financial Officer and the appointment of its new Chief Financial Officer as well as changes in the Company's financial accounting and reporting personnel. The Company's continuous risk assessment process was not effective in responding to the rapid rate of change in personnel and new business developments and the Company did not have sufficient human resources available to adequately assess risk and reinforce or strengthen controls in the requisite timeframe. Prior to presentation of its financial statements for their approval by the Company's audit committee and board of directors, the Company determined that it would adjust its consolidated annual financial statements as at and for the year ended December 31, 2020 with respect to expense recognition to correct errors in the calculation of asset and liability balances and the appropriate IFRS application and disclosure required for an amendment of a contract with an external development firm.

There can be no assurance that the Company will be able to successfully remediate the identified material weaknesses, or that it will not identify additional control deficiencies or material weaknesses in the future. If the Company is unable to successfully remediate its existing or any future material weaknesses in its ICFR, the accuracy and timing of the Company's financial reporting may be adversely affected, the Company may be unable to maintain compliance with securities laws and Nasdaq listing requirements regarding the timely filing of periodic reports, investors may lose confidence in the Company's financial reporting and the price of its Common Shares may decline. The accuracy of the Company's financial statements and related disclosures could be affected if the judgments, assumptions or estimates used in the Company's critical accounting policies are inaccurate.

DIVIDENDS

The Company has not declared or paid dividends in the past. The Company presently intends to retain future earnings, if any, to finance the expansion and growth of its business. Any future determination to pay dividends will be at the discretion of the Company's board of directors and will depend on the Company's financial conditions, results of operations, capital requirements and other factors the board of directors deems relevant. The Company had negative cash flow from operating activities for its fiscal year ended December 31, 2020 and the negative cash flow is expected to continue.

There are no other restrictions on the Company's 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 the Company from paying dividends.

CAPITAL STRUCTURE

The authorized capital of the Company consists of an unlimited number of Common Shares of which 83,184,843 were issued and outstanding as at December 31, 2020. The holders of Common Shares are entitled to receive notice of and to attend all annual and special meetings of the Company's shareholders and to one vote in respect of each Common Share held at the record date for each such meeting. The holders of Common Shares are entitled, at the discretion of the Board of Directors, to receive out of any or all of the Company's profits or surplus properly available for the payment of dividends, any dividend declared by the Board of Directors and payable by the Company on the Common Shares. The holders of the Common Shares will participate rateably 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.

The Company also had outstanding as at December 31, 2020, warrants entitling their holders to purchase an aggregate of 28,969,671 Common Shares. These warrants are set forth in the table below:

Warrant	Issue Date	Expiry Date	Number Issued	Number Outstanding	Exercise Price US $	Exercise Price CDN $
TMD.WT.G	12-Feb-16	12-Feb-21	389,027	386,694		$30.00
TMD.WT.G	23-Feb-16	12-Feb-21	58,226	58,226		$30.00
TMD.WT.H	31-Mar-16	31-Mar-21	501,831	501,831		$36.00
TMD.WT.H	14-Apr-16	31-Mar-21	75,275	75,275		$36.00
TMD.WT.I	20-Sep-16	20-Sep-21	569,444	569,444		$22.50
TMD.WT.I	27-Oct-16	20-Sep-21	67,667	67,667		$22.50
Not Listed	16-Mar-17	16-Mar-21	357,787	355,253		$15.00
Not Listed	29-Jun-17	29-Jun-22	1,612,955	75,810		$6.00
Not Listed	21-Jul-17	29-Jun-22	370,567	370,567		$6.00
Not Listed	24-Aug-17	24-Aug-22	563,067	563,067		$6.00
Not Listed	05-Dec-17	05-Dec-22	1,533,333	1,533,333		$18.00
Not Listed	10-Apr-18	10-Apr-23	1,126,665	1,126,665		$10.50
Not Listed	10-May-18	10-Apr-23	168,889	168,889		$10.50
Not Listed[1]	10-Aug-18	10-Aug-23	7,679,574	6,661,068	$2.920	
Not Listed[2]	21-Mar-19	21-Mar-24	8,455,882	8,455,882	$3.950	
Not Listed	27-Mar-20	27-Mar-25	3,500,000	-	$0.190	
Not Listed	06-May-20	06-Nov-25	2,757,252	-	$0.3002	
Not Listed	10-Jun-20	10-Jun-24	9,000,000	8,000,000	$1.00	
			39,021,181	**28,969,671**		

Notes:

(1) Note 1 - Includes a ratchet clause triggered August 29, 2019 lowering the exercise price from $3.20 to $2.92.
(2) Note 2 - Includes a ratchet clause triggered August 29, 2019 lowering the exercise price from $4.00 to $3.95.

All of the warrants referenced in the table above are governed by warrant indentures (each a "Warrant Indenture") entered into between the Company and Computershare Trust Company of Canada (or its predecessor, Olympia Transfer Services Inc.), as warrant agent thereunder, and/or warrant certificates, as the case may be, dated the date of issue of each series of warrants. A copy of each Warrant Indenture can be found on SEDAR at www.sedar.com.

The Company also has outstanding stock options ("Options") granted to directors, officers, employees, and consultants of the Company. At December 31, 2020, there were 2,923,770 Options outstanding. Each Option entitles its holder to purchase one Common Share of the Company at an exercise price determined by the Company's board of directors (the "Board"). The terms of each Option including the number of Options granted, the exercise price, the expiry date and any vesting provisions were determined by the Board at the time of the grant of each Option. Please see the Company's notes to the annual audited financial statements for the 2020 fiscal year, which provides more detailed disclosure on the Options outstanding and the terms thereof.

MARKET FOR SECURITIES

The Common Shares are listed for trading in Canada on the TSX under the symbol "TMD". The Common Shares are also traded on Nasdaq in the United States under the symbol "TMDI". In addition, the Company currently has three classes of warrants which were, over the last 12 months, listed on the TSX under the symbols TMD.WT.G, TMD.WT.H and TMD.WT.I.

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

Summary of Monthly Trading – Common Shares

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

	TSX			Nasdaq		
Month	**High (CDN $)**	**Low (CDN $)**	**Volume**	**High (US $)**	**Low (US $)**	**Volume**
January	0.98	0.61	1,511,067	0.73	0.46	8,537,585
February	0.69	0.48	886,752	0.53	0.35	4,902,858
March	0.64	0.15	3,135,116	0.45	0.12	77,716,212
April	0.56	0.25	2,141,538	0.41	0.18	27,393,353
May	0.47	0.31	2,181,952	0.34	0.22	44,936,077
June	2.34	0.36	21,451,006	1.75	0.26	190,677,088
July	1.44	1.01	2,493,086	1.08	0.75	42,171,080
August	1.19	0.92	1,054,766	0.93	0.7	14,494,065
September	1.16	0.75	1,228,709	0.9	0.57	10,361,281
October	1.09	0.92	683,717	0.83	0.69	7,034,141
November	1.81	0.86	2,372,867	1.4	0.6539	20,172,366
December	2.60	1.47	4,136,613	2.04	1.15	33,167,559

Summary of Monthly Trading – February 2021 Warrants

Titan issued 11,670,818 warrants on February 12, 2016 and 1,746,789 warrants on February 23, 2016, each exercisable for 0.03333 Common Shares at an exercise price of CDN $1.00, per warrant, as adjusted in accordance with the Share Consolidation, until February 12, 2021 (the "February 2021 Warrants"). The February 2021 Warrants are listed for trading on the TSX under the symbol "TMD.WT.G". The following table shows the high and low trading prices and the volume of the February 2021 Warrants traded on the TSX for each of the last 12 months (as reported by the TSX).

Month	High (CDN $)	Low (CDN $)	Volume
January	0.015	0.005	274,825
February	0.010	0.005	383,600
March	0.010	0.005	28,000
April	0.005	0.005	0
May	0.005	0.005	8,000
June	0.030	0.005	1,064,400
July	0.010	0.010	98,089
August	0.010	0.005	34,000
September	0.005	0.005	10,000
October	0.040	0.005	220,000
November	0.010	0.005	62,000
December	0.005	0.005	197,020

Summary of Monthly Trading – March 2021 Warrants

Titan issued 15,054,940 warrants on March 31, 2016 and 2,258,241 warrants on April 14, 2016, each exercisable for 0.03333 Common Shares at an exercise price of CDN $1.20 per warrant, as adjusted in accordance with the Share Consolidation, until March 31, 2021 (the "March 2021 Warrants"). The March 2021 Warrants are listed for trading on the TSX under the symbol "TMD.WT.H". The following table shows the high and low trading prices and the volume of the March 2021 Warrants traded on the TSX for each of the last 12 months (as reported by the TSX).

Month	High (CDN $)	Low (CDN $)	Volume
January	0.010	0.005	319,000
February	0.010	0.005	339,000
March	0.005	0.005	1,000
April	0.005	0.005	0
May	0.005	0.005	0
June	0.030	0.005	1,098,000
July	0.005	0.005	1,000
August	0.005	0.005	1,000
September	0.005	0.005	0
October	0.015	0.005	232,000
November	0.005	0.005	8,000
December	0.005	0.005	6,000

Summary of Monthly Trading – September 2021 Warrants

Titan issued 17,083,333 warrants on September 20, 2016 and 2,030,000 warrants on October 27, 2016, each exercisable for 0.03333 Common Shares at an exercise price of CDN $0.75 per warrant, as adjusted in accordance with the Share Consolidation, until September 20, 2021 (the "September 2021 Warrants"). The September 2021 Warrants are listed for trading on the TSX under the symbol "TMD.WT.I". The following table shows the high and low trading prices and the volume of the September 2021 Warrants traded on the TSX for each of the last 12 months (as reported by the TSX).

Month	High (CDN $)	Low (CDN $)	Volume
January	0.030	0.010	23,500
February	0.010	0.010	191,000
March	0.010	0.005	137,200
April	0.010	0.005	134,000
May	0.010	0.005	479,333
June	0.030	0.005	428,000
July	0.020	0.020	45,650
August	0.020	0.005	961,500
September	0.010	0.005	47,250
October	0.015	0.005	207,398
November	0.020	0.005	185,000
December	0.030	0.005	253,539

PRIOR SALES

The following tables shows the date, price and number of warrants, broker warrants and stock options, as applicable, that were issued by the Company during the most recently completed financial year.

Warrants issued:

Date	Exercise Price per Common Shares	Number of Common Shares Exercisable
March 27, 2020	US $0.1900	3,500,000
May 6, 2020	US $0.3002	2,757,252
June 10, 2020	US $1.0000	3,250,000
June 10, 2020	US $0.0001	11,500,000
June 10, 2020	US $1.0000	5,750,000

Broker warrants issued:

Date	Exercise Price	Number of Stock Options Granted
March 7, 2020	US $0.2125	490,000
May 6, 2020	US $0.4534	386,015
June 10, 2020	US $1.2500	1,260,000

Stock options issued:

Date	Exercise Price	Number of Stock Options Granted
July 30, 2020	CDN $1.266	22,425
July 30, 2020	US $0.9622	1,350,000
September 29, 2020	CDN $0.96	27,304
September 29, 2020	US $0.7300	19,568
September 30, 2020	US $0.7450	4,723
December 10, 2020	CDN $1.7000	4,000
December 10, 2020	US $1.3100	623,000

ESCROWED SECURITIES

As of December 31, 2020, there were no Common Shares of the Company held, to the Company's knowledge, in escrow or that were subject to a contractual restriction on transfer.

DIRECTORS AND OFFICERS

The following sets out details respecting the directors and executive officers of the Company, as of the date of this Annual Information Form. 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 and Country of Residence	Offices Held	Director Since	Principal Occupation(s) During the Five-Year Period Ending December 31, 2020
David J. McNally Salt Lake City, Utah, U.S.A.	President, Chief Executive Officer and Chairman	2017	Chief Executive Officer and President of Titan from January 3, 2017, and January 9, 2017, respectively. Chairman of the Board of Titan from June 4, 2020. 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.
Monique L. Delorme Toronto, Ontario, Canada	Chief Financial Officer	NA	Chief Financial Officer of Titan from October 2020 to the present. VP Finance of Titan from July 2020 to September 2020. Controller of Titan from March 2019 to July 2020. Chief Financial Officer of Northern Sphere Mining Corp. from April 2017 to June 2020. Chief Financial Officer of Zonetail Inc. from September 2015 to October 2017.
Perry Genova Chapel Hill, North Carolina, U.S.A.	Senior Vice President, Research and Development, and President of Titan Medical USA Inc.	NA	Senior Vice President, Research and Development of Titan from February 2017 to present. Chief Executive Officer of Centauri Surgical from February 2016 to February 2017. Chief Executive Officer of Oncoscope Inc. from September 2009 to January 2016.

Name and Municipality and Country of Residence	Offices Held	Director Since	Principal Occupation(s) During the Five-Year Period Ending December 31, 2020
Curtis Jensen Gig Harbor, Washington State, U.S.A.	Vice President, Quality and Regulatory Affairs	NA	Vice President, Quality and Regulatory Affairs from April 2017 to present. Senior Regulatory Affairs Associate at Ekos Corporation from December 2015 to April 2017.
Jasminder Brar Toronto, Ontario, Canada	Vice President, Legal, IP and Strategic Initiatives, General Counsel and Corporate Secretary	NA	Vice President, Legal, IP and Strategic Initiatives, General Counsel and Corporate Secretary from June 2020 to present. Director of Strategic Development and IP Counsel from May 2011 to June 2020.
Paul Cataford(1), (2), (3) Calgary, Alberta, Canada	Lead Independent Director, Audit Committee Chair	2020	Chief Executive Officer of Zephyr Sleep Technologies Inc. from September 2010 to present.
Anthony J. Giovinazzo(1), (2), (3) Carlisle, Ontario, Canada	Director, Governance/Nominating Committee Chair	2020	Chief Executive Officer of Cynapsus Therapeutics Inc. from October 2009 to October 2016. Director of Promis Neurosciences from March 2017 to September 2020. Director of Pond Technologies Inc. from November 2020 to present.
Cary G. Vance(1), (2), (3) Lehi, Utah, U.S.A.	Director, Compensation Committee Chair	2020	Chief Executive Officer of XCath Inc. from October 2020 to present. Chief Executive Officer of OptiScan Biomedical from May 2018 to June 2020. Chief Executive Officer of MyoScience Inc. from April 2017 to May 2018. Chief Executive Officer of Hansen Medical from May 2014 to August 2016.
Stephen Randall Toronto, Ontario, Canada	Director	2017	Chief Financial Officer of Titan from March 2010 to September 2020.

Notes:

(1) Member of the Audit Committee
(2) Member of the Compensation Committee
(3) Member of the Corporate Governance and Nominating Committee

Other than as disclosed herein:

1. none of the directors or executive officers of the Company, or any person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of any class or series of the Company's outstanding voting securities, or any associate or affiliate of any of the foregoing persons or companies is, at the date hereof, or has within 10 years before the date hereof, been a director, chief executive officer or chief financial officer of any other issuer that (a) was the subject of a cease trade, an order similar to a cease trade order or an order that denied the issuer access to any statutory exemptions under securities legislation, that was in effect for a period of more than 30 consecutive days (an "Order"), that, while that person was acting in the capacity as a director, chief executive officer or chief financial officer, or (b) was subject to an order that was issued after that person ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as a director, chief executive officer or chief financial officer;

2. none of the directors or executive officers of the Company, or any person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of any class or series of the Company's outstanding voting securities, or any associate or affiliate of any of the foregoing persons or companies (a) is, at the date hereof, or has within 10 years before the date hereof, been a director or executive officer of any other issuer that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, manager or trustee appointed to hold its assets, or (b) has, within 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, manager or trustee appointed to hold its assets; and

3. none of the directors or executive officers of the Company, or any person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of any class or series of the Company's outstanding voting securities, or any associate or affiliate of any of the foregoing persons or companies has been subject to (a) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority, or (b) 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.

Notwithstanding the foregoing, Cary G. Vance, a director of the Corporation, served as President and Chief Executive Officer of OptiScan Biomedical Corporation ("OptiScan") from May 2018 to June 2020, and during his service in those capacities, on June 2, 2020, OptiScan filed a petition in the United States Bankruptcy Court for the District of Delaware seeking relief under chapter 11 of the United States Bankruptcy Code.

The term of each director will expire at the next annual meeting of the Company. As at December 31, 2020, the then directors and executive officers of the Company, as a group, beneficially owned, directly or indirectly, or exercised control or direction over 60,007 Common Shares of the Company, representing approximately 0.08% of the Company's outstanding Common Shares. The information as to securities beneficially owned or over which control or direction is exercised is not within the knowledge of the Company and has been furnished by the directors and executive officers individually. There are no material conflicts of interest among any of the directors or executive officers and the Company, other than any potential conflicts as disclosed above. See "*Risk Factors – Conflicts of Interest*".

Leadership Team

The Company's leadership team is as follows:

David J. McNally,
President, CEO & Director

Mr. McNally is an experienced entrepreneur and public company CEO with over 33 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 exchange. 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.

Education: Bachelor of Science in mechanical engineering from Lafayette College, MBA from the University of Utah, co-inventor on over 40 U.S. and international patents.

Monique L. Delorme,
Chief Financial Officer

Ms. Delorme joined Titan Medical in March 2019 as Vice President, Finance and was named Chief Financial Officer in September 2020. She has more than 25 years of senior corporate leadership experience in the areas of finance, operations, corporate strategy and change management. She has served as a financial executive for several large and small publicly traded companies where she earned a reputation as a strategic leader with strong execution and communication skills.

In 2012, she launched a successful consulting practice providing financial and CFO services to both private and public companies. Ms. Delorme is a CPA, CA.

Education: Bachelor of Commerce from McGill University and post-graduate Diploma in Public Accountancy from McGill University.

Perry Genova,
Senior Vice President, Research and Development, and President of Titan Medical USA Inc.

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 30 U.S. Patents and on 24 patents pending.

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

Curtis Jensen
Vice President, Quality and Regulatory Affairs

Mr. Jensen has over 20 years of experience leading quality and regulatory affairs teams at established and start-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, Bachelor of Science in electrical engineering from Utah State University.

Jasminder Brar
Vice President, Legal, IP and Strategic Initiatives, General Counsel & Corporate Secretary

Mr. Brar draws from more than 15 years of technical, business and legal experience to manage Titan's legal affairs while leading and executing a comprehensive IP program that facilitates innovation, enhances business objectives and mitigates risks. Working alongside other Titan executives, engineering teams and advisers, Mr. Brar ensures that the company's IP strategy remains in alignment with the company's overall business strategy.

Before joining Titan, Mr. Brar practiced law with the law firm of Smart & Biggar in Vancouver, British Columbia. Before practicing law, he worked as an engineer and in product marketing with National Semiconductor in Santa Clara, California.

Education: Law degree (LL.B.) and a Bachelor of Science degree in Computer Engineering, both from the University of Manitoba.

Surgeon Advisory Board

The Surgeon Advisory Board as at December 31, 2019 consists of the following surgeons who are widely regarded as leaders in the field of medical robotics or fields of surgery where robotics are 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.

Kevin Stepp, M.D.

Dr. Stepp, a board certified urogynecologist, is devoted to providing women with excellent medical and surgical care. He and his team offer a wide variety of innovative treatments for urinary incontinence, pelvic floor disorders, bleeding disorders, fibroids, endometriosis, and other problems that can affect a woman's quality of life. Many treatments do not require surgery and include medications, targeted exercises, dietary changes, or nonsurgical management. However, when surgery is necessary, Dr. Stepp specializes in offering cutting edge minimally invasive surgery including pioneering Single Incision Laparoscopy. Dr. Stepp completed his residency in Obstetrics and Gynecology at MetroHealth/Cleveland Clinic. He then completed a 3-year, combined fellowship in Minimally Invasive Surgery and Urogynecology/Pelvic Reconstructive Surgery at the Cleveland Clinic in Cleveland, Ohio. After his fellowship, he returned to MetroHealth Medical Center where he served as Fellowship Director in Urogynecology and Minimally Invasive Surgery. He now practices in Charlotte, North Carolina, as the Chief of Urogynecology and Pelvic Surgery at Atrium Health - formerly Carolinas Healthcare System. He participated in the very first robotic assisted laparoscopic hysterectomy in a cadaver and published the first single port hysterectomy using modular robotic lightweight laparoscopic assistants. He is a two time recipient of the AAGL Golden Laparoscope award (AAGL's most prestigious award) for his videos on “Principles of Laparoscopic Suturing” and “Single Incision Laparoscopy Total Laparoscopic Hysterectomy with Sacral Colpopexy”, and has served on the Golden Laparoscope Award Review Committee. He is an active reviewer for multiple medical journals and has mentored obstetrics and gynecology residents during their training.

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 Institut hospital-universitaire de 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.

AUDIT COMMITTEE

Audit Committee’s Charter

See Schedule A.

Composition of the Audit Committee

As of the date of this Annual Information Form, the table below sets out the members of the Audit Committee, describes their education and experience relevant to their role on the committee and states whether they are financially literate and/or independent.

Director	Independent	Financially Literate
Paul Cataford Mr. Cataford has served as an independent corporate director for a number of public companies. He holds a Bachelor of Science degree in Mechanical Engineering from Queen's University, an MBA specializing in Finance from Schulich School of Business at York University, and is a graduate of the Institute of Corporate Directors – Directors College, Rotman School of Business at the University of Toronto.	Yes	Yes
Anthony J. Giovinazzo Mr. Giovinazzo previously served as Chief Executive Officer and director of Cynapsus Therapeutics Inc. Mr. Giovinazzo has a Chartered Director (C.Dir.) and Audit Committee Certification (ACC) from The Directors College and the DeGroote School of Business at McMaster University. He received a Bachelor of Arts degree in Economics and Accounting from McMaster University and an MBA from IMD Geneva, Switzerland.	Yes	Yes
Cary G. Vance Mr. Vance previously served in executive and director roles at several issuers. Mr. Vance is Lean/Six Sigma Black Belt certified, and earned a Bachelor of Arts degree in Economics and an MBA from Marquette University.	Yes	Yes

Pre-Approval Policies and Procedures

The Audit Committee has adopted a pre-approval policy with respect to permitted non-audit services proposed to be provided by the external auditor as disclosed in paragraph 3(a)(iv) of the Audit Committee's Charter (Schedule A).

External Auditor Service Fees

The table below sets out all fees billed by the Company's external auditor in respect of the last two financial years.

Financial Year Ended	Audit Fees(1)	Audit-Related Fees(2)	Tax Fees(3)	All Other Fees(4)
December 31, 2020	70,779	37,064	7,058	47,855
December 31, 2019	62,281	59,344	4,888	116,893

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" are fees billed by the auditor for products and services not included in the previous categories. These fees relate primarily to the work performed by the Company's external auditor in conjunction with filings by the Company of prospectus and registration statements with securities regulators in Canada and the United states in respect of public and registered offerings completed by Titan in 2019 and 2020.

CONFLICT OF INTEREST

To the knowledge of the Company, and other than as disclosed herein, there is no known existing or potential material conflicts of interest among the Company, its directors and officers, or other members of management as a result of their outside business interests, except that certain of its directors may serve as directors of other companies and therefore it is possible that a conflict may arise between their duties to the Company and their duties as a director of such other companies.

PROMOTER

No person is or has been within the two financial years immediately preceding the date hereof, or during the current financial year, a promoter of the Company.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Other than as disclosed herein, there are no legal proceedings to which the Company is or was a party to, or that any of its property is or was the subject of, during the year ended December 31, 2020, and the Company is not aware of any such proceedings that are contemplated. Please see disclosures with regard to the Company's dispute with Naglreiter under the headings, "*Relationships with Suppliers*" on page 10 and "*Naglreiter Settlement*" on page 9, which was resolved in 2020.

No penalties or sanctions were imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during the year ended December 31, 2020, nor has the Company 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.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Except as disclosed in this Annual Information Form, none of the directors or executive officers of the Company, or any person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of any class or series of the Company's outstanding voting securities, or any associate or affiliate of any of the foregoing persons or companies, has or has had any material interest, direct or indirect, in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or is reasonably expected to materially affect the Company.

TRANSFER AGENT AND REGISTRAR

Computershare Limited is the Company's registrar and transfer agent. The register of the transfers of the Common Shares of the Company are located at 100 University Avenue, 8th Floor, Toronto, Ontario M5J 2Y1.

MATERIAL CONTRACTS

The Company enters into a variety of contracts in the normal course of business. Material contracts entered into since January 1, 2020, or before January 1, 2020, but still in effect and that are or were required to be filed under Section 12.2 of National Instrument 51-102 *Continuous Disclosure Obligations* include:

1. the Warrant Indentures described under the section "*Capital Structure*";
2. the Aspire Agreement;
3. the Second Aspire Agreement;
4. the Development Agreement;
5. the License Agreement; and
6. the Note.

EXPERTS

The auditors of the Company are BDO Canada LLP, Charted Accountants, Licensed Public Accountants. BDO Canada LLP is independent in accordance with the Rules of Professional Conduct as outlined by the Institute of Chartered Professional Accountants of Ontario.

ADDITIONAL INFORMATION

Additional information relating to the Company may be found on SEDAR at www.sedar.com and on the Company's website at www.titanmedicalinc.com.

Upon request to the Company's registered office at 155 University Avenue, Suite 750, Toronto, Ontario M5H 3B7, the Company will provide any person with a copy of this annual information form and any other documents that are incorporated by reference into a preliminary short form prospectus or short form prospectus filed in respect of a distribution of securities of the Company.

Additional information including directors' and executive officers' remuneration and indebtedness, principal holders of the Company's securities and options to purchase securities, where applicable, is contained in the management information circular of the Company dated August 31, 2020 (as amended on September 10, 2020). Additional financial information is provided in the Company's financial statements and management's discussion and analysis for the year ended December 31, 2020.

SCHEDULE A

TITAN MEDICAL INC.

AUDIT COMMITTEE CHARTER

Purpose

The Audit Committee (the "**Audit Committee**" or the "**Committee**") is a committee of the board of directors (the "**Board of Directors**" or the "**Board**") of Titan Medical Inc. (the "**Company**"). Its primary function is to assist the Board in fulfilling its oversight responsibilities by evaluating and making recommendations to the Board as appropriate with respect to:

- financial reporting;
- the external auditors, including performance, qualifications, independence, and their audit of the Company's financial statements;
- internal controls and disclosure controls;
- financial risk management;
- the Company's Code of Conduct (the "**Code**"); and
- related party transactions.

The Audit Committee will also have authority to review and, in its discretion, approve certain matters, in accordance with and within the limitations prescribed by this Charter.

The Audit Committee's primary function is to assist the Board of Directors in fulfilling its responsibilities. It is, however, the Company's management which is responsible for preparing the Company's financial statements and it is the Company's external auditors who are responsible for auditing those financial statements.

Composition and Member Qualification

The Committee shall, subject to applicable exemptions available under National Instrument 52-110 - Audit Committees ("**NI 52-110**"), Rule 10A-3 of the United States Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and Rule 5605 of the Nasdaq Stock Market Rules, be comprised of at least three directors, each of whom shall be an independent director of the Company (as defined below) and pursuant to the requirements of Rule 10A-3 and Rule 5605. Pursuant to NI 52-110 (as implemented by the Canadian Securities Administrators and as amended from time to time), a director is considered to be "independent" if he or she has no direct or indirect "material relationship" with the Company which is a relationship that could, in the view of the Board of Directors, be reasonably expected to interfere with the exercise of a director's independent judgment. Notwithstanding the foregoing, a director shall be considered to have a "material relationship" with the Company if he or she falls in one of the categories listed in Schedule A attached hereto.

Subject to an applicable exemption available under NI 52-110, all members of the Audit Committee must, to the satisfaction of the Board of Directors, be "financially literate" within the meaning of NI 52-110. NI 52-110 provides that a director will be considered "financially literate" if he or she has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements.

At least one member shall meet the requirements of an Audit Committee Financial Expert as set forth in Item 407 of Regulation S-K of the Exchange Act.

Each member will have, to the satisfaction of the Board, sufficient skills and/or experience as are relevant and will be of contribution to the carrying out of the mandate of the Committee.

Appointment and Term of Office

Each member of the Committee and the Chair of the Committee shall be appointed from and by the Board of Directors, on the recommendation of the Corporate Governance and Nominating Committee, at the time of each annual meeting of the shareholders of the Company, and shall hold office until the next annual meeting.

Any member of the Committee may be removed or replaced at any time by the Board and shall cease to be a member of the Committee upon ceasing to be a director.

The Board may fill vacancies on the Committee by appointment from among its members. If and whenever a vacancy shall exist on the Committee, the remaining members may exercise all their powers so long as a quorum remains in office.

Meetings

The Committee is to meet at least four times annually (and more frequently if circumstances require). The Audit Committee is to meet prior to filing the quarterly financial statements in order to review and discuss the unaudited financial results for the preceding quarter and the related management's discussion and analysis ("**MD&A**") and is to meet prior to filing the annual audited financial statements and MD&A in order to review and discuss the audited financial results for the year and related MD&A.

The Audit Committee will meet periodically with management and the external auditors in separate sessions to discuss any matters that the Audit Committee or each of these groups believe should be discussed privately. The Audit Committee shall meet with the external auditors in a separate session at each regularly scheduled meeting of the Committee at which such auditors are present.

A quorum for the transaction of business at any meeting of the Committee is the presence in person or via tele-conference or video-conference of a simple majority of the total number of members of the Committee. If within one hour of the time appointed for a meeting of the Committee, a quorum is not present, the meeting shall stand adjourned to the same hour on the second business day following the date of such meeting at the same place. If at the adjourned meeting a quorum as hereinbefore specified is not present within one hour of the time appointed for such adjourned meeting, the quorum for the adjourned meeting will consist of the members then present.

Meetings of the Committee shall be held from time to time and at such place as the Committee or the Chair of the Committee may determine, within or outside Canada, upon not less than 48 hours' prior notice to each of the members.

Meetings of the Committee may be held without 48 hours' prior notice if all of the members entitled to vote at such meeting who do not attend, waive notice of the meeting and, for the purpose of such meeting, the presence of a member at such meeting shall constitute waiver on his or her part. Any member of the Committee or the Chairman of the Board shall be entitled to request that the Chair of the Committee call a meeting. A notice of a meeting of the Committee may be given verbally, in writing or by telephone, fax or other means of communication, and need not specify the purpose of the meeting. Members of the Committee may attend meetings of the Committee by tele-conference or video-conference.

The Committee shall keep minutes of its meetings which shall be submitted to the Board of Directors. The Committee may, from time to time, appoint any person who need not be a member, to act as secretary at any meeting.

All decisions of the Committee will require the vote of a majority of its members present at a meeting at which a quorum is present. Actions of the Committee may be taken by an instrument or instruments in writing signed by all of the members of the Committee, and such actions shall be effective as though they had been decided by a majority of votes cast at a meeting of the Committee called for such purpose. Such instruments in writing may be signed in counterparts each of which shall be deemed to be an original and all originals together shall be deemed to be one and the same instrument.

The Committee shall meet in camera, without management, at each meeting of the Committee, and otherwise as considered appropriate by the members of the Committee. Any member of the Committee may move the Committee in camera at any time during the course of a meeting, and a record of any decisions made in camera shall be maintained by the Chair of the Committee.

Duties and Responsibilities

To fulfill its duties and responsibilities, the Audit Committee shall evaluate and make recommendations to the Board, or have the authority to approve, as appropriate, with respect to the following matters:

1. General Responsibilities

    a. Create and maintain a Committee plan for the year.

    b. Review and assess this Charter at least annually, prepare revisions to its provisions as conditions dictate, and refer its assessment and any proposed revisions to the Corporate Governance and Nominating Committee or the Board.

    c. Report and make recommendations periodically to the Board on the matters covered by this Charter.

    d. Perform any other activities consistent with this Charter, the Company's Articles and By- Laws and governing law, as the Audit Committee or the Board of Directors deems necessary or appropriate.

2. Financial Reporting

    a. Recommend, to the Board, for approval:

        i. the Company's annual and interim financial statements and related MD&A;

        ii. all other financial statements that require approval by the Board, including financial statements for use in prospectuses or other offering or public disclosure documents and financial statements required by regulatory authorities; and

        iii. financial information for use in press releases, including annual and interim profit or loss press releases, prior to their publication and/or filing with any governmental body and/or release.

b. Notwithstanding, part (a), approve:

i. the Company's interim financial statements and related MD&A; and

ii. financial information for use in press releases related to interim profit or loss press releases, prior to their publication and/or filing with any governmental body and/or release.

c. Overseeing the work of the external auditor engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Company, including the resolution of disagreements between management and the external auditor regarding financial reporting.

d. Before the release of financial statements and related disclosures to the public, obtain confirmation from the CEO and CFO as to the matters addressed in the certifications required by the securities regulatory authorities.

e. Review any litigation, claim or other contingency that could have a material effect on the financial statements.

f. Review the external auditors' judgments about the quality and appropriateness, not just the acceptability, of the Company's accounting principles and financial disclosure practices, as applied in its financial reporting.

g. Review the status of significant accounting estimates and judgments and special issues (e.g., major transactions, changes in the selection or application of accounting policies, off- balance sheet items, effect of regulatory and financial initiatives).

h. Review and approve, if appropriate, major changes to the Company's accounting principles and practices as suggested by management with the concurrence of the external auditors.

3. External Auditor

a. Responsible for (i) the selection of the external auditors, considering independence and effectiveness; and (ii) the fees and other compensation to be paid to the external auditors.

b. Require, in accordance with applicable law, that the external auditors report directly to the Audit Committee.

c. Review the annual audit plan with the external auditors and pre-approve all audit and non-audit services to be provided to the Company or its subsidiaries by the external auditors in a manner consistent with NI 52-110.

d. Oversee the work and review the performance of the external auditors and approve any proposed discharge of the external auditors when circumstances warrant.

e. Monitor the relationship between management and the external auditors, including reviewing any management letters or other reports of the external auditors.

f. Discuss with the external auditor any (i) difference of opinion with management on material auditing or accounting issues, and (ii) any audit problems or difficulties experienced by the external audit in performing the audit. Where there are significant unsettled issues, the Audit Committee is to assist in arriving at an agreed course of action for the resolution of such matters.

g. Periodically consult with the external auditors without management present about significant risks or exposures, internal controls and other steps that management has taken to control such risks, and the completeness and accuracy of the Company's financial statements. Particular emphasis should be given to the adequacy of internal controls to expose any payments, transactions, or procedures that might be deemed illegal or otherwise improper.

h. Review and discuss, on an annual basis, with the external auditors all significant relationships they have with the Company to determine their independence.

i. Review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the Company's external auditors.

j. Consider any matter required to be communicated to the Audit Committee by the external auditors under applicable generally accepted auditing standards, applicable law and listing standards, including the auditor's report to the Audit Committee (and management's response thereto).

4. Monitoring Financial Matters, Internal Controls, Management Systems and Disclosure Controls

a. Oversee management's review of the adequacy of the Company's accounting and financial reporting systems, including with respect to the integrity and quality of the Company's financial statements and other financial information.

b. Oversee management's review of the adequacy of the Company's internal controls and management systems to safeguard assets from loss and unauthorized use and to verify the accuracy of the financial records.

c. In consultation with the Corporate Governance and Nominating Committee, oversee management's disclosure controls and procedures regarding the Company's financial information to confirm that the Company's financial information that is required to be disclosed under applicable law or stock exchange rules is disclosed.

d. Review any special audit steps adopted in light of material control deficiencies.

5. Risk Management

a. Review management's assessment and management of financial risk, including insurance coverage, and obtain the external auditors' opinion of management's assessment of significant financial risks facing the Company and how effectively such risks are being managed or controlled.

6. Code of Conduct

a. Recommend to the Board any significant changes to the Code, monitor compliance with the Code and ensure that management has established a system to enforce the Code. Review appropriateness of actions taken to ensure compliance with the Code and review the results of confirmations and violations thereof.

b. Oversee procedures in the Code for (i) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal controls or auditing matters, and (ii) the confidential, anonymous submission by employees of concerns regarding questionable accounting or auditing matters.

c. Approve any waiver from compliance with the Code for directors and executive officers, promptly report any such waiver to the Board, and ensure appropriate disclosure of any such waiver.

Each of which shall be conducted with the Corporate Governance and Nominating Committee.

7. Related Party Transactions

a. Review and pre-approve all proposed related party transactions and situations involving a potential or actual conflict of interest involving a director, member of executive management, or affiliate, that are not required to be dealt with by an "independent committee" pursuant to securities laws, other than routine transactions and situations arising in the ordinary course of business, consistent with past practice.

8. Financial Legal Compliance

   a. Review management's monitoring of the Company's systems in place to ensure that the Company's financial statements, reports and other financial information disseminated to governmental organizations and the public satisfy legal requirements.

   b. Review with legal counsel any legal matters that could have a significant effect on the Company's financial statements.

   c. Review with legal counsel the Company's compliance with applicable law and inquiries received from regulators and governmental agencies to the extent they may have a material impact on the financial position of the Company.

9. Expense Accounts and Management Perquisites

   a. Recommend to the Board policies and procedures with respect to directors' and executive management's expense accounts and management perquisites and benefits, including their use of corporate assets and expenditures related to executive travel and entertainment, and review the results of the procedures performed in these areas by the external auditors.

10. Succession Planning

   a. Consult with the Compensation Committee and Corporate Governance and Nominating Committee on succession planning for the directors and executive management.

11. Disclosure of Audit Committee Function

   a. Oversee the preparation of, and recommend to the Board, the disclosure of the Audit Committee's composition and responsibilities and how they were discharged as required to be published annually in the Company's management information circular or annual information form pursuant to applicable law (including NI 52-110).

   b. Approve any other significant information relating to matters within this Charter contained in the Company's disclosure documents.

12. Legal Compliance

   a. Oversee management's compliance with laws with respect to the audit function, and recommend to the Board any changes to the Company's practices in these areas.

   b. Satisfy itself that management monitors significant trends in the area of financial reporting, and evaluates their impact on the Company.

The foregoing list is not exhaustive. The Audit Committee may, in addition, perform such other functions as may be necessary or appropriate for the performance of its responsibilities and duties.

Responsibilities of Committee Chair

The primary responsibility of the Chair of the Audit Committee is to be responsible for the management and effective performance of the Committee and provide leadership to the Committee in fulfilling this Charter and any other matters delegated to it by the Board. To that end, the Committee Chair's duties, authorities and responsibilities shall include:

a. Working with the Board Chair, the Chief Executive Officer and the Corporate Secretary to establish the frequency of Committee meetings and the agendas for such meetings.

b. Providing leadership to the Committee and presiding over Committee meetings.

c. Facilitating the flow of information to and from the Committee and fostering an environment in which the Committee members may ask questions and express their viewpoints.

d. Reporting to the Board with respect to the significant activities of the Committee and any recommendations made by the Committee.

e. Annually assess the effectiveness of the Committee, soliciting input from all Committee members.

f. Pre-approve audit and non-audit services not already included in the Committee pre-approved audit plan, with any such decisions to be presented to the full Committee at its next regularly scheduled meeting.

g. Taking such other steps as are reasonably required to ensure that the Committee carries out this Charter.

h. Carry out any other duties and responsibilities delegated by the Committee or assigned by the Board.

Other Organizational Matters

The members and the Chair of the Committee shall be entitled to receive remuneration for acting in such capacity as the Board may from time to time determine.

a. The Committee shall have the resources and authority appropriate to discharge its duties and responsibilities, including the authority to:

    i. engage, select, retain, terminate, set and approve the fees and other compensation and other retention terms of special or independent counsel, accountants or other advisors, as it deems appropriate;

    ii. obtain appropriate funding to pay, or approve the payment of, such approved fees, at the expense of the Company; and

    iii. communicate directly with the internal and external auditors.

The Committee shall have full access to books, records, facilities, and personnel of the Company, as it deems necessary to carry out its duties.

The Committee's performance shall be evaluated annually, in accordance with a process developed by the Corporate Governance and Nominating Committee and approved by the Board, and results of that evaluation shall be reported to the Corporate Governance and Nominating Committee and to the Board.

Last reviewed and approved by the Board of Directors: Dec 2020

SCHEDULE A-1

MATERIAL RELATIONSHIP

I. Material Relationships

1. An audit committee member is independent if he or she has no direct or indirect material relationship with the issuer.

2. For the purposes of subsection (1), a "material relationship" is a relationship which could, in the view of the issuer's board of directors, be reasonably expected to interfere with the exercise of a member's independent judgement.

3. Despite subsection (2), the following individuals are considered to have a material relationship with an issuer:

   a. an individual who is, or has been within the last three years, an employee or executive officer of the issuer;

   b. an individual whose immediate family member is, or has been within the last three years, an executive officer of the issuer;

   c. an individual who:

      i. is a partner of a firm that is the issuer's internal or external auditor,

      ii. is an employee of that firm, or

      iii. was within the last three years a partner or employee of that firm and personally worked on the issuer's audit within that time;

   d. an individual whose spouse, minor child or stepchild, or child or stepchild who shares a home with the individual:

      i. is a partner of a firm that is the issuer's internal or external auditor,

      ii. is an employee of that firm and participates in its audit, assurance or tax compliance (but not tax planning) practice, or

      iii. was within the last three years a partner or employee of that firm and personally worked on the issuer's audit within that time;

   e. an individual who, or whose immediate family member, is or has been within the last three years, an executive officer of an entity if any of the issuer's current executive officers serves or served at that same time on the entity's compensation committee; and

   f. an individual who received, or whose immediate family member who is employed as an executive officer of the issuer received, more than $75,000 in direct compensation from the issuer during any 12-month period within the last three years.

4. Despite subsection (3), an individual will not be considered to have a material relationship with the issuer solely because

   a. he or she had a relationship identified in subsection (3) if that relationship ended before March 30, 2004; or

   b. he or she had a relationship identified in subsection (3) by virtue of subsection (8) if that relationship ended before June 30, 2005.

5. For the purposes of clauses (3) (c) and (3) (d), a partner does not include a fixed income partner whose interest in the firm that is the internal or external auditor is limited to the receipt of fixed amounts of compensation (including deferred compensation) for prior service with that firm if the compensation is not contingent in any way on continued service.

6. For the purposes of clause (3) (t), direct compensation does not include:

    a. remuneration for acting as a member of the board of directors or of any board committee of the issuer, and

    b. the receipt of fixed amounts of compensation under a retirement plan (including deferred compensation) for prior service with the issuer if the compensation is not contingent in any way on continued service.

7. Despite subsection (3), an individual will not be considered to have a material relationship with the issuer solely because the individual or his or her immediate family member

    a. has previously acted as an interim chief executive officer of the issuer, or

    b. acts, or has previously acted, as a chair or vice-chair of the board of directors or of any board committee of the issuer on a part-time basis.

8. For the purpose of this section I, an issuer includes a subsidiary entity of the issuer and a parent of the issuer.

II. Additional Independence Requirements

1. Despite any determination made under section I, an individual who

    a. accepts, directly or indirectly, any consulting, advisory or other compensatory fee from the issuer or any subsidiary entity of the issuer, other than as remuneration for acting in his or her capacity as a member of the board of directors or any board committee, or as a part-time chair or vice-chair of the board or any board committee; or

    b. is an affiliated entity of the issuer or any of its subsidiary entities, is considered to have a material relationship with the issuer.

2. For the purposes of subsection (1), the indirect acceptance by an individual of any consulting, advisory or other compensatory fee includes acceptance of a fee by

    a. an individual's spouse, minor child or stepchild, or a child or stepchild who shares the individual's home; or

    b. an entity in which such individual is a partner, member, an officer such as a managing director occupying a comparable position or executive officer, or occupies a similar position (except limited partners, non-managing members and those occupying similar positions who, in each case, have no active role in providing services to the entity) and which provides accounting, consulting, legal, investment banking or financial advisory services to the issuer or any subsidiary entity of the issuer.

3. For the purposes of subsection (1), compensatory fees do not include the receipt of fixed amounts of compensation under a retirement plan (including deferred compensation) for prior service with the issuer if the compensation is not contingent in any way on continued service.

Exhibit 99.2

TITAN MEDICAL INC.
Consolidated Financial Statements
Years Ended December 31, 2020, and 2019

(IN UNITED STATES DOLLARS)

Tel: 416 865 0200
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BDO Canada LLP
222 Bay Street
Suite 2200, PO Box 131
Toronto ON M5K 1H1 Canada

Report of Independent Registered Public Accounting Firm

Shareholders of Titan Medical Inc.
Toronto, Ontario

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial position of Titan Medical Inc. (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of net and comprehensive loss, shareholders' deficit, and cash flows for the years ended December 31, 2020 and 2019, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for the years ended December 31, 2020 and 2019, in conformity with International Financial Reporting Standards (IFRSs) as issued by International Accounting Standards Board ("IASB").

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated 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.

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 consolidated 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 consolidated 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 consolidated 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 consolidated 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
February 20, 2021

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

TITAN MEDICAL INC.
Consolidated Statements of Financial Position
As at December 31, 2020 and 2019
(In U.S. Dollars)

	Note	December 31, 2020	December 31, 2019
Assets			
Current Assets:			
Cash and cash equivalents		$ 25,468,805	$ 814,492
Amounts receivable		71,566	84,097
Deposits		765,599	481,400
Prepaid expense		642,214	369,453
Total Current Assets		$ 26,948,184	$ 1,749,442
Property, plant, and equipment	3	245,372	-
Right of use assets - leases	4	866,601	30,394
Patent rights	5	1,777,978	1,601,745
Total Assets		**$ 29,838,135**	**$ 3,381,581**
Liabilities			
Current Liabilities:			
Accounts payable and accrued liabilities	6	$ 4,528,890	$ 11,412,896
Current portion of lease liability	4	165,768	21,071
Note payable	7	1,885,497	$ -
Warrant liability	8	36,316,681	3,621,444
Total Current Liabilities		**$ 42,896,836**	**$ 15,055,411**
Long-term lease liability	4	750,791	8,001
Total Liabilities		**$ 43,647,627**	**$ 15,063,412**
Shareholders' Deficiency			
Share capital	9	$ 215,819,053	$ 194,859,415
Contributed surplus		9,400,885	8,303,527
Deficit		(239,029,430)	(214,844,773)
Shareholders' Deficiency		**$ (13,809,492)**	**$ (11,681,831)**
Total Liabilities and Deficiency		**$ 29,838,135**	**$ 3,381,581**

Commitments (Note 11)
Subsequent events (Note 17)
See notes to the consolidated financial statements

Approved on behalf of the Board:

"signed"	*"signed"*
Paul Cataford	David McNally
Director	Chairman and CEO

TITAN MEDICAL INC.
Consolidated Statements of Net and Comprehensive Loss
For the Years Ended December 31, 2020 and 2019
(In U.S. Dollars)

	Note	December 31, 2020	December 31, 2019
Revenue		$ 20,000,000	**$ -**
Expenses			
Amortization		$ 236,842	$ 32,555
Consulting fees		536,968	1,136,146
Foreign exchange loss (gain)		113,972	37,972
Impairment of patent rights	5	45,981	-
Insurance		698,961	480,362
Interest charges		1,091,216	422,989
Management salaries and fees		2,549,924	2,547,484
Marketing and investor relations		140,976	289,350
Office and general		385,163	436,051
Professional fees		2,150,958	943,535
Rent		41,320	58,064
Research and development		7,937,171	51,418,056
Stock based compensation	9 b	1,097,358	1,651,119
Travel		27,622	272,594
		$ 17,054,432	$ 59,726,277
Net Earnings (Loss) from Operations		**2,945,568**	**(59,726,277)**
Finance Income (Cost)			
Interest received from investments		$ 29,143	$ 115,584
Gain on settlements	6	2,512,626	-
Gain (loss) on change in fair value of warrants	8	(27,855,678)	19,800,645
Warrant liability issue cost		(1,816,316)	(2,097,031)
		$ (27,130,225)	$ 17,819,198
Net and Comprehensive Loss		**$ 24,184,657**	**$ 41,907,079**
Basic and Diluted Loss per Share		**$ 0.36**	**$ 1.37**
Weighted Average Number of Common Shares Basic and Diluted		**67,008,897**	**30,689,545**

See notes to the consolidated financial statements

TITAN MEDICAL INC.
Consolidated Statements of Shareholders' Deficit
For the Years Ended December 31, 2020 and 2019
(In U.S. Dollars)

	Note	Share Capital Number	Share Capital Amount	Contributed Surplus	Deficit	Total Deficiency
Balance - December 31, 2018		21,675,849	$ 170,502,394	$ 6,652,409	$ (172,937,694)	$ 4,217,109
Issued pursuant to agency agreement	9 a	8,455,882	13,717,131	-	-	13,717,131
Issued pursuant to private placements	9 a	8,757,444	5,727,971	-	-	5,727,971
Share issue expense		-	(2,090,124)	-	-	(2,090,124)
Warrants exercised during the year	9 a	1,018,506	7,002,043	-	-	7,002,043
Stock based compensation	9 b	-	-	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)**
Balance - December 31, 2019		39,907,681	$ 194,859,415	$ 8,303,527	$ (214,844,773)	$ (11,681,831)
Issued pursuant to agency agreement[1]	9 a	23,923,700	12,818,657	-	-	12,818,657
Share issue expense		-	(487,788)	-	-	(487,788)
Common stock equivalents converted	9 a	11,500,000	1,150	-	-	1,150
Warrants exercised during the year	9 a	7,853,462	8,627,619	-	-	8,627,619
Stock based compensation	9 b	-	-	1,097,358	-	1,097,358
Net and comprehensive loss		-	-	-	(24,184,657)	(24,184,657)
Balance - December 31, 2020		**83,184,843**	**$ 215,819,053**	**$ 9,400,885**	**$ (239,029,430)**	**$ (13,809,492)**

1. Includes net proceeds from the issuance of common share equivalents (see note 9 a)
See notes to the consolidated financial statements

TITAN MEDICAL INC.
Consolidated Statements of Cash Flows
For the Years Ended December 31, 2020 and 2019
(In U.S. Dollars)

	Note	December 31, 2020	December 31, 2019
Cash provided by (used in):			
Operating activities:			
Net and comprehensive loss		$ (24,184,657)	$ (41,907,079)
Items not involving cash:			
Amortization		236,842	32,555
Impairment of patent rights		45,981	-
Non-cash interest on lease		36,274	-
Stock based compensation		1,097,358	1,651,119
Warrant liability-fair value adjustment		27,855,678	(19,800,645)
Warrant liability-foreign exchange adjustment		95,631	17,687
Non-cash issue costs		764,132	744,501
Non-cash settlements	6, 9 a	(2,262,052)	-
Non-cash note payable expenses and accrued interest		385,496	-
Changes in non-cash working capital items:			
Amounts receivable, prepaid expenses and deposits		(544,429)	8,336,486
Accounts payable and accrued liabilities		(4,371,371)	4,965,008
Cash used in operating activities		(845,117)	(45,960,368)
Financing activities:			
Net proceeds from issuance of common shares and warrants[1]		24,688,851	35,766,754
Note payable		1,500,000	-
Repayment of lease liabilities		(90,053)	(5,100)
Cash provided by financing activities		26,098,798	35,761,654
Investing Activities:			
Purchase of property, plant and equipment		(280,410)	-
Cost of patents		(318,958)	(458,037)
Cash used in investing activities		(599,368)	(458,037)
Increase (decrease) in cash and cash equivalents		24,654,313	(10,656,751)
Cash and cash equivalents, beginning of the period		814,492	11,471,243
Cash and cash equivalents, end of the period		**$ 25,468,805**	**$ 814,492**
Cash and cash equivalents comprise:			
Cash		$ 1,302,037	$ 141,768
Cash equivalents		24,166,768	672,724
		$ 25,468,805	$ 814,492

1. Includes net proceeds from the issuance of common share equivalents - see note 9 a.
See notes to the consolidated financial statements

1. DESCRIPTION OF BUSINESS

Nature of Operations:

Titan Medical Inc.'s ("Titan" or the "Company") business is in the research and development stage and is focused on the continued design and development of robotic assisted surgical technologies for application in minimally invasive surgery including the development of the Enos^{TM} robotic single-access surgical system (the "Enos system"). 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 the later stage 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.

On May 29, 2020, the Company established a wholly owned subsidiary, Titan Medical USA Inc. ("Titan USA" or "Subsidiary"), a corporation that is duly organized and existing under the laws of Delaware.

Basis of Presentation:

(a) Statement of Compliance

These consolidated financial statements for the year ended December 31, 2020, and December 31, 2019, have been prepared in accordance with International Financial Reporting Standards and International Accounting Standards as issued by the International Accounting Standards Board ("IASB") and interpretations (collectively "IFRS").

The consolidated financial statements were authorized for issue by the Board of Directors on February 20, 2021.

(b) Basis of Measurement

These consolidated 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) Basis of Consolidation

These consolidated financial statements incorporate the financial statements of the Company and its wholly owned subsidiary. The accounts of the Subsidiary were prepared for the same reporting year as the Company, using consistent accounting policies. Intercompany transactions, balances and unrealized gains or losses on transactions have been eliminated.

(d) Functional and Presentation Currency

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

1. DESCRIPTION OF BUSINESS (continued)

(e) Use of Estimates and Judgements

The preparation of the consolidated 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 consolidated financial statements and the reported amount of expenses during the year. Financial statement items subject to significant judgement include:

- incremental borrowing rate used to measure lease liabilities
- fair value estimate of the measurement of leases and warrant liabilities

assessment of the Company's ability to meet its obligations as they come due as described in Note 13, the company is subject to liquidity risk. The Company expects to be able to continue its operations for the foreseeable future.

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.

(f) COVID-19

Since December 31, 2019, the outbreak of a 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, along with the uncertainty around the disease itself, have caused material disruption to business globally resulting in an economic slowdown. Global equity markets have experienced significant volatility. 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. Due to the uncertainty caused by the COVID-19 outbreak, the Company is experiencing a longer recruitment cycle for recruiting technical personnel, and travel restrictions have slowed its ability to select and qualify suppliers for certain of its products. Furthermore, contractors and suppliers engaged by the Company may also be impacted by COVID-19 and there is a risk they could fail to meet their obligations to the Company. The effects of these impediments on the Company's ability to achieve its milestones, including the timeline for completion, is unknown at this time.

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) Property, plant, and equipment

Property, plant, and equipment is recorded at cost less accumulated depreciation and accumulated impairment losses, if any. The Company records depreciation using the straight-line method over the

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

estimated useful lives of the capital assets, as follows:

Computer equipment	3 years
Furniture and fixtures	3 years
Machinery	3 years
Leasehold improvements	Remaining term of the lease

(c) Leases

The Company assesses whether a contract is or contains a lease, at inception of a contract in accordance with IFRS 16 Leases. The Company recognizes a right-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 lease payments that are not paid at the commencement date, discounted by an incremental borrowing rate ("IBR"). The IBR is defined as the interest rate that the lessee would incur to borrow under a secured loan with terms similar to those of the lease. For the year ended December 31, 2020, the Company used an IBR of 6% (2019: 6%).

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.

Right of use assets are initially measured at the amount of the lease liability, reduced for any lease incentives received.

Subsequent to initial measurement, lease liabilities increase as a result of interest charged at a constant rate on the balance outstanding and are reduced for lease payments made. Right-of-use assets are amortized on a straight-line basis over the remaining term of the lease.

For short-term leases (leases with a term of 12 months or less) and leases of low value assets (accounted for 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, if any, is presented within general expenses in the consolidated statement of comprehensive net income and 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 patents, as prescribed by the granting body, which range up to twenty (20) years.

(e) Impairment of Long-Lived Assets

The Company reviews computer equipment, furniture and equipment, machinery, leasehold improvements, right-of-use assets, and patent rights for objective evidence of impairment whenever events or changes in circumstances indicate the carrying value 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(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.

(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 or a ratchet down feature. 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 listed on the Toronto Stock Exchange ("TSX") adjusted for differences in the terms of the warrant.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(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.

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) 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(m) 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.

(n) Revenue Recognition

The Company currently recognizes revenue when it has persuasive evidence of a contract, performance obligations have been identified and satisfied, payment terms have been identified, and it is probable that the Company will collect the consideration it is entitled to.

On June 3, 2020, the Company entered into a license agreement (the "License Agreement") with Medtronic, whereby the Company is providing exclusive access to certain IP rights relating to robotic assisted surgical technologies (see Note 7). The Company is accounting for the license fee at the point in time when the rights were transferred. Revenue from the License Agreement for intellectual property rights and know-how ("Royalty Payment") is recognized when rights are granted, and customer acceptance is established. Compensation received for the performance of technology transfer services relating to the License Agreement is accounted for separately from the Royalty Payment and will be recognized at the time the service is performed. (see Note 14)

On June 3, 2020, the Company also entered into a development and license agreement with Medtronic (the "Development Agreement") that provides for the development of robotic assisted surgical technologies for use by both Titan and Medtronic in their respective businesses. The Company's entitlement to receive up to $31 million pursuant to the Development Agreement is conditional upon the completion of certain technology development milestones set forth in the Development Agreement. Due to the uncertainty of milestone achievements and entitlement of payments, the Company recognizes revenue only upon acceptance by the customer of work performed and the milestone achieved (see Note 14). Revenue from the Development Agreement and the allocation of ownership and license rights developed under each milestone is recognized when the rights are granted, and customer acceptance is established.

(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.

(q) 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 consolidated financial statements, as the effect would be anti-dilutive.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

(r) Adoption of New Accounting Standard

There were a number of amendments effective for annual reporting periods beginning on or after January 1, 2020 which were adopted during the year. None were deemed to have a material impact. The amendments were:

- IAS 1 *Presentation of Financial Statements* and IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* (Amendment – Disclosure Initiative – Definition of Material;
- Revisions to the Conceptual Framework for Financing Reporting;
- Definition of a Business (Amendments to IFRS 3);
- Interest Rate Benchmark Reform – IBOR 'phase 2' (Amendments to IFRS 9 and IAS 39) and
- COVID-19 – Related Rent Concessions (Amendments to IFRS 16).

(s) Standards, Amendments, and Interpretations not yet Effective

IAS 16 "Property, Plant and Equipment" outlines the accounting treatment for most types of property, plant, and equipment. Property, plant, and equipment is initially measured at its cost, subsequently measured either using a cost or revaluation model, and depreciated so that its depreciable amount is allocated on a systematic basis over its useful life. In May 2020 the IASB issued Property, Plant and Equipment – Proceeds before Intended Use which made amendments to IAS 16. The amendments prohibit an entity from deducting from the cost of property, plant and equipment any proceeds from selling items produced while the entity is preparing the asset for its intended use. Instead, an entity shall recognize such sales proceeds and related cost in net income. This amendment is effective for the Company beginning January 1, 2022. The Company is assessing the impact of the amendment on its financial statements.

The Company does not expect any other standards issued by the IASB, but not yet effective, to have a material impact on the group.

(In U.S. Dollars)

3. PROPERTY, PLANT, AND EQUIPMENT

For the year ended December 31, 2020	Cost	Accumulated depreciation	Net Book Value
Computer equipment			
Balance at December 31, 2019	$ -	$ -	$ -
Additions	49,721	-	49,721
Depreciation in the year	-	(12,827)	(12,827)
Furniture and fixtures			
Balance at December 31, 2019	-	-	-
Additions	53,689	-	53,689
Depreciation in the year	-	(20,352)	(20,352)
Leasehold improvements			
Balance at December 31, 2019	-	-	-
Additions	23,619	-	23,619
Depreciation in the year	-	(1,858)	(1,858)
Machinery			
Balance at December 31, 2019	-	-	-
Additions	153,380	-	153,380
Depreciation in the year	-	-	-
Balance at December 31, 2020	**$ 280,409**	**$ (35,037)**	**$ 245,372**

For the year ended December 31, 2019	Cost	Accumulated depreciation	Net Book Value
Computer equipment			
Balance at December 31, 2018	$ -	$ -	$ -
Furniture and fixtures			
Balance at December 31, 2018	-	-	-
Leasehold improvements			
Depreciation in the year	-	-	-
Machinery			
Balance at December 31, 2019	-	-	-
Balance at December 31, 2019	**$ -**	**$ -**	**$ -**

(In U.S. Dollars)

4. LEASES

At inception of a lease, the Company recognizes a right-of-use asset 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).

Toronto, Ontario Lease

The Company entered into an 18-month lease for its corporate head office in Toronto, Ontario on November 1, 2019. The monthly base rent is $2,806. The Company recognized a right-of-use asset offset by a prepayment and a lease liability of $34,172 relating to this lease.

For the year ended December 31, 2020, the Company recognized $22,670 of amortization and $12,743 in interest expense relating to this lease and repaid $33,666 of the lease liability. The lease liability at December 31, 2020, was $8,145.

Chapel Hill, North Carolina Lease

The Company entered into a 62-month lease for its R&D office in Chapel Hill, North Carolina on April 1, 2020. The monthly base rent is $8,320. The Company recognized a right-of-use asset and a lease liability of $442,684 relating to this lease.

Titan USA entered into a lease amending agreement to lease additional office space in Chapel Hill, North Carolina on November 1, 2020. The term of the lease amendment is 55 months, and the base monthly rent is $10,628. The Company recognized a right of use asset and a lease liability of $498,584 relating to this lease.

For the year ended December 31, 2020, the Company recognized $82,391 of amortization and $23,531 in interest expense relating to the leases at Chapel Hill, repaid $56,387 of the lease liability. The lease liability at December 31, 2020, was $908,414.

Right of use assets **For the year ended December 31, 2020**		**Cost**		**Accumulated amortization**		**Net Book Value**
Head Office						
Balance at December 31, 2019	$	34,172	$	(3,778)	$	30,394
Amortization in the year		-		(22,670)		(22,670)
Chapel Hill						
Balance at December 31, 2019	$	-	$	-	$	-
Additions		941,268		-		941,268
Amortization in the year		-		(82,391)		(82,391)
Balance at December 31, 2020	**$**	**975,440**	**$**	**(108,839)**	**$**	**866,601**

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

(In U.S. Dollars)

4. LEASES (continued)

Lease liabilities – maturity analysis	2020	2019
Less than one year	$ 165,768	$ 21,071
One to three years	646,481	8,001
Four to five years	104,310	-
Total lease liabilities at December 31, 2020	**$ 916,559**	**$ 29,072**

5. PATENT RIGHTS

For the year ended December 31, 2020	Cost	Accumulated Amortization	Net Book Value
Balance at December 31, 2019	$ 1,856,750	$ (255,005)	$ 1,601,745
Impairment losses	(45,981)	-	(45,981)
Additions during the year	318,958	-	318,958
Amortization in the year	-	(96,744)	(96,744)
Balance at December 31, 2020	**$ 2,129,727**	**$ (351,749)**	**$ 1,777,978**

For the year ended December 31, 2019	Cost	Accumulated Amortization	Net Book Value
Balance at December 31, 2018	$ 1,398,713	$ (226,228)	$ 1,172,485
Impairment losses	-	-	-
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**

For the year ended December 31, 2020, the Company recorded impairment charges of $45,981 on certain older patent applications which have been abandoned.

6. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

The balance of accounts payable and accrued liabilities at December 31, 2020, is $4,528,890 (December 31, 2019 – $11,412,896). The majority of the payables and accrued liabilities of $3,732,616 relate to amounts owed to the Company's product development suppliers, an amount of $445,815 relates to legal and audit and the balance relates to regular business operations (December 31, 2019 - $10,049,622, $560,904 respectively).

Product Development Supplier Agreement

On April 30, 2020, the Company reached an agreement with a supplier engaged by the Company for the payment of outstanding payables to be settled in full by the end of 2020. On October 13, 2020, the Company entered into a second agreement with the supplier, pursuant to which the supplier has extended the time for payment of the outstanding amounts owed by the Company to the end of the first quarter of 2021. Pursuant to the second agreement, the Company paid a monthly amount of $250,000 from October through December 2020, a lump sum payment of $2,299,682 in December 2020, $750,000 in January 2021 and will pay a monthly amount of $750,000 in each of February and March 2021. These payments will be applied toward settling the outstanding amounts owed. Assuming successful completion of conditions under the second agreement, the Company is not expected to incur interest on the outstanding amounts after December 2020, and $673,000 of accrued interest is to be forgiven. A gain on settlement related to the accrued interest has been recognized in the quarter ended December 31, 2020.

(In U.S. Dollars)

6. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES (continued)

Naglreiter Consulting Litigation

In late 2019, the Company became involved in litigation with Naglreiter Consulting, LLC. On June 8, 2020, the Company entered into a settlement agreement pursuant to which (i) a sum of $1,050,000 was paid to Naglreiter, (ii) Naglreiter returned certain personal property and related electronic data in its possession, (iii) and the pending litigation was dismissed. The Company recognized a gain on settlement of $1,839,626 in the year.

7. NOTE PAYABLE

During the year, the Company entered into an agreement with Medtronic for a note payable (the "Note"). In connection with the Note,the Company executed and delivered a security agreement in favour of Medtronic (the "Security Agreement"). Under the Note agreement, the Company received $1.5 million in cash and owes an additional $296,046 related to certain legal, transaction and intellectual property related expenses incurred by Medtronic pursuant to the Medtronic agreements and will bear interest at the rate of 8% per annum. The unpaid principal balance owing under the Note, together with any accrued and unpaid interest and all other unpaid obligations under the Note, shall be due and payable in full on the earliest to occur of: (i) June 3, 2023, (ii) a Change of Control (as defined in the Note), or (iii) the completion of the last milestone under the Development Agreement (see Note 2). For the year ended December 31, 2020, the Note has accrued interest of $89,451.

The Security Agreement grants a security interest in all of the Company's present and future property including all personal property, inventory, equipment, and intellectual property to the Corporate Lender. In addition, Medtronic's rights and powers include without limitation (a) exercising and enforcing all rights and remedies of a holder of collateral as if Medtronic were the absolute owner of the collateral, (b) collection of any proceeds arising in respect of all of the Company's property pledged as security for the loan, (c) license or sublicense, whether on an exclusive or non-exclusive basis, of any of the Company's intellectual property for such term and on such conditions and in such manner as Medtronic in its sole judgement determines (taking into account such provisions as may be necessary to protect and preserve such intellectual property), and (d) the right to enforce its security in the event of a default which may include the appointment of a receiver by instrument or order of the court.

8. WARRANT LIABILITY

For the year ended December 31, 2020	Number of Warrants		Amount
Opening Balance	21,203,411	$	3,621,444
Issue of warrants expiring, March 27, 2025	3,500,000		475,300
Issue of warrants expiring, November 6, 2025	2,757,252		508,200
Issue of warrants expiring, June 10, 2024	9,000,000		9,709,200
Warrants exercised during the year	(7,257,252)		(5,948,771)
Warrants expired during the year	(233,740)		(26,198)
Foreign exchange adjustment during the year	-		95,631
Fair value adjustment during the year	-		27,881,875
Balance at December 31, 2020	**28,969,671**	**$**	**36,316,681**

(In U.S. Dollars)

8. WARRANT LIABILITY (continued)

For the year ended December 31, 2019	Number of Warrants		Amount
Opening Balance	13,901,859	$	11,250,167
Issue of warrants expiring, March 21, 2024	8,455,882		15,897,059
Warrants exercised during the year	(1,018,506)		(3,742,824)
Warrants expired during the year	(135,824)		-
Foreign exchange adjustment during the year	-		17,687
Fair value adjustment during the year	-		(19,800,645)
Balance at December 31, 2019	**21,203,411**	**$**	**3,621,444**

For the year ended December 31, 2020, the warrants outstanding by series are:

Listed Warrants	Expiry date		Exercise Price CDN$	Number issued	Number outstanding
TMD.W.T.G	12-Feb-21	$	30.00	447,253	444,920
TMD.W.T.H	31-Mar-21	$	36.00	577,106	577,106
TMD.W.T.I	20-Sep-21	$	22.50	637,111	637,111
Balance at December 31, 2020				**1,661,470**	**1,659,137**

Unlisted Warrants (in CDN$)	Expiry date		Exercise Price CDN$	Number issued	Number outstanding
March 2017	16-Mar-21	$	15.00	357,787	355,253
June 2017	29-Jun-22	$	6.00	1,983,522	446,377
August 2017	24-Aug-22	$	6.00	563,067	563,067
December 2017	5-Dec-22	$	18.00	1,533,333	1,533,333
April 2018	10-Apr-18	$	10.50	1,295,554	1,295,554
Balance at December 31, 2020				**5,733,263**	**4,193,584**

Unlisted Warrants (in USD$)	Expiry date		Exercise Price USD$	Number issued	Number outstanding
August 2018[1]	10-Aug-23	$	2.9200	7,679,574	6,661,068
March 2019[2]	21-Mar-24	$	3.9500	8,455,882	8,455,882
March 2020	27-Mar-25	$	0.1900	3,500,000	-
May 2020	6-Nov-25	$	0.3002	2,757,252	-
June 2020	10-Jun-24	$	1.0000	9,000,000	8,000,000
Balance at December 31, 2020				**31,392,708**	**23,116,950**

Total Warrants Outstanding	**38,787,441**	**28,969,671**

Note 1 – includes a ratchet clause triggered August 29, 2019, lowering the exercise price from $3.20 to $2.92.
Note 2 – includes a ratchet clause triggered August 29, 2019, lowering the exercise price from $4.00 to $3.95.

9. SHARE CAPITAL

(a) **Authorized:** unlimited number of common shares, no par value
Issued: 83,184,843 (December 31, 2019: 39,907,681)

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

June 2020 Offering

On June 10, 2020, the Company completed an offering of securities made pursuant to an agency agreement dated March 17, 2020 between the Company and H.C. Wainwright & Co., LLC ("Wainwright") for the purchase and sale of 6,500,000 common shares (the "Common Shares"), 11,500,000 common share equivalents (each, a "June 2020 Common Share Equivalent") and 9,000,000 common share purchase warrants (each a "June 2020 Common Warrant") for total gross proceeds of approximately $18,000,000 ($16,500,000 net of closing cash costs including cash commissions described below). The Common Shares, June 2020 Common Share Equivalent and June 2020 Common Warrants were sold in fixed combinations at an offering price of $1.00, consisting of one Common Share and one-half June 2020 Common Warrant or one June 2020 Common Share Equivalent and one-half June 2020 Common Warrant. Each June 2020 Common Warrant is convertible into one Common Share at a conversion price of $1.00 per Common Share for a period of four (4) years following the date of the closing of the offering. Each June 2020 Common Share Equivalent is convertible into one Common Share at a conversion price of $0.0001 and will expire when converted in full.

Pursuant to the placement agent agreement, in addition to the cash commission paid to Wainwright of $1,260,000, broker warrants were issued to Wainwright which entitle the holder to purchase 1,260,000 Common Shares at an exercise price of U.S. $1.25 per share prior to expiry on June 10, 2024.

The 11,500,000 June 2020 Common Stock Equivalents were converted during the year for total proceeds of $1,150.

May 2020 Financing

On May 6, 2020, the Company completed a registered direct offering of securities made pursuant to an agency agreement dated March 17, 2020 between the Company and Wainwright that provide for the purchase and sale of 5,514,504 Common Shares of the Company at a per share purchase price of U.S. $0.36268 per Common Share and 2,757,252 unregistered Common Share purchase warrants (each, a "May 2020 Warrant"), resulting in total gross proceeds of $2,000,000 ($1,575,000 net of estimated closing cash costs including cash commission described below). Each May 2020 Warrant is exercisable to purchase one Common Share at an exercise price of U.S. $0.3002 per Common Share for a period of five and one-half (5.5) years following the date of closing of the offering. All of the May 2020 Warrants were exercised during the year.

Pursuant to the placement agency agreement, in addition to the cash commission paid to Wainwright of $140,000, broker warrants were issued to Wainwright which entitle the holder to purchase 386,015 Common Shares at a price of U.S. $0.45335 per share prior to expiry on November 6, 2025. During the year, 260,560 broker warrants were exercised.

(In U.S. Dollars)

9. SHARE CAPITAL (continued)

March 2020 Offering

On March 27, 2020, the Company completed an offering of securities made pursuant to an agency agreement dated March 17, 2020, between the Company and Wainwright for the purchase and sale of 7,000,000 Common Shares at a per share purchase price of U.S. $0.17 per Common Share and 3,500,000 common share purchase warrants (each, a "March 2020 Warrant"), resulting in total gross proceeds of $1,190,000 ($862,294 net of closing cash costs including cash commission described below). Each March 2020 Warrant is exercisable to purchase one Common Share at an exercise price of U.S. $0.19 per Common Share prior to expiry on March 27, 2025. The March 2020 Warrants were valued at $475,300 based on the value determined by the Black-Scholes model and the balance of $714,700 was allocated to common shares.

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 U.S. $0.2125 per share prior to expiry on March 27, 2025. During the year, 335,650 broker warrants were exercised.

Second Aspire Agreement

On December 23, 2019, the Company entered into a common share purchase agreement (the "Second Aspire Agreement") with Aspire Capital Fund, LLC ("Aspire") whereby Aspire committed to purchase up to $35 million of Common Shares, to a maximum of 9,729,777 Common Shares, at Titan's request from time to time, until June 23, 2022. On commencement of the Second Aspire Agreement, Titan issued to Aspire 973,000 Common Shares as consideration for entering into the Second Aspire Agreement. The value of the Common Shares issued of $423,440 was included in capital and offset by a fee of the same amount plus $35,122 for additional costs incurred.

Between January 3, 2020, and February 13, 2020, the Company issued 4,408,048 Common Shares pursuant to the Second 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**

Under the Second Aspire Agreement, the balance remaining on Aspire's commitment is 4,348,729 Common Shares (with maximum value of $32.9 million), at Titan's request from time to time, until June 23, 2022.

(In U.S. Dollars)

9. SHARE CAPITAL (continued)

January 2020 Equity Transaction

On January 3, 2020, the Company announced that Cambridge Design Partnership Ltd. ("Cambridge") had subscribed for Common Shares. 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.

First Aspire Agreement

On August 29, 2019, the Company entered into a common share purchase agreement (the "First Aspire Agreement") with Aspire whereby Aspire committed to purchase up to $35 million of Common Shares 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 U.S. $1.6879 per Common Share for gross proceeds of $3.0 million and issued to Aspire 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:

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 Equity 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. ("Bloom Burton"). The Company sold 8,455,882 units under the offering at a price of U.S. $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 U.S. $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.

(In U.S. Dollars)

9. SHARE CAPITAL (continued)

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 U.S. $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.

(b) Stock Options and Compensation Options

Titan has reserved and set aside up to 15% of the issued and outstanding Common Shares for granting of options to employees, officers, consultants, and advisors. At December 31, 2020, 9,553,956 Common Shares (December 31, 2019: 5,986,152) 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.

For the year ended December 31, 2020, $1,097,358 of stock-compensation expense was recorded (December 31, 2019 – $1,651,119).

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, 2020, are outlined below:

Grant date / recipient	Number of options	Exercise price	Vesting conditions	Contractual life of options
January 28, 2020, options granted to a director	25,765	CDN $0.657	Options vest immediately	7 years
July 30, 2020, options granted to a director	22,425	CDN $1.266	Options vest immediately	7 years
July 30, 2020, options granted to employees	1,350,000	USD $0.962	Options vest as to ¼ of the total number of options granted, every year from grant date	7 years
September 29, 2020, options granted to board members	27,304 19,568	CDN $0.960 USD $0.730	Options vest immediately	7 years
September 30, 2020, options granted to a consultant	4,723	USD $0.745	Options vest immediately	3 years
December 10, 2020, options granted to employees	4,000 623,000	CDN $1.700 USD $1.310	Options vest as to ¼ of the total number of options granted, every year from grant date	7 years

(In U.S. Dollars)

9. SHARE CAPITAL (continued)

A summary of the status of the Company's outstanding stock options as of December 31, 2020 and December 31, 2019 and changes during the years ended on those dates is presented in the following table:

STOCK OPTIONS OUTSTANDING	CANADIAN DOLLAR		UNITED STATES DOLLAR	
	Number stock options	Weighted Average Exercise Price	Number of stock options	Weighted Average Exercise Price
Balance at December 31, 2019	860,379	$ 5.89	854,042	$ 2.65
Granted	79,494	0.99	1,997,291	0.96
Expired / forfeited	(105,908)	8.39	(761,528)	2.66
Balance at December 31, 2020	**833,965**	**$ 5.10**	**2,089,805**	**$ 1.13**

	CANADIAN DOLLAR		UNITED STATES DOLLAR	
	Number stock options	Weighted Average Exercise Price	Number of stock options	Weighted Average Exercise Price
Balance at December 31, 2018	875,433	$ 18.20	50,349	$ 1.55
Granted	35,719	4.54	843,693	2.72
Expired / forfeited	(50,773)	31.79	(40,000)	3.72
Balance at December 31, 2019	**860,379**	**$ 5.89**	**854,042**	**$ 2.65**

(In U.S. Dollars)

9. 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, 2020, are as follows:

Canadian Dollar Denominated Options

Exercise Price (CDN)	Number Outstanding	Weighted-average remaining contractual life (years)	Options Exercisable
$0.66	25,765	6.08	25,765
$0.96	27,304	6.75	27,304
$1.27	22,425	6.58	22,425
$1.70	4,000	6.95	-
$3.28	31,498	4.66	31,498
$4.54	682,422	3.09	360,237
$9.00	11,481	4.52	11,481
$30.00	28,260	0.65	28,260
$32.40	810	0.07	810
	833,965	**3.61**	**507,780**

United States Dollar Denominated Options

Exercise Price (USD)	Number Outstanding	Weighted-average remaining contractual life (years)	Options Exercisable
$0.73	19,568	6.75	19,568
$0.75	4,723	2.75	4,723
$0.96	1,350,000	6.58	-
$1.31	623,000	6.95	-
$1.55	50,349	0.96	50,349
$2.20	2,165	5.55	2,165
$3.72	40,000	1.69	-
	2,089,805	**6.45**	**76,805**
Total	**2,923,770**	**5.64**	**584,585**

The weighted average exercise price of Canadian dollar denominated options outstanding is CDN $5.10 and CDN $4.86 for options that are exercisable. The weighted average exercise price of U.S. dollar denominated options outstanding is U.S. $1.13 and U.S. $1.31 for options that are exercisable.

9. SHARE CAPITAL (continued)

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 option pricing model. Expected volatility was estimated by considering historic average share price volatility. The weighted average inputs in the original currency of the grants (CDN$ or U.S.$) used in the measurement of fair values at grant date of the share-based option grants for the year end December 31, 2020 and 2019 are as follows:

	CANADIAN DOLLARS		UNITED STATES DOLLARS	
	2020	**2019**	**2020**	**2019**
Fair value at grant	$ 0.82	1.61	0.89	1.48
Share price at grant	1.01	2.90	1.04	2.36
Exercise price	1.04	4.54	1.07	2.72
Expected option life	4 years	3.4 years	4.0 years	3.5 years
Risk free interest rate	0.67%	1.43%	0.29%	1.50%
Expected volatility	145.61%	98.10%	149.77	97.90%
Expected dividends	Nil	Nil	Nil	Nil

(c) Warrants

In addition to the warrants accounted for as a liability at December 31, 2020 (see Note 8), the Company has 2,131,716 broker warrants that are issued, outstanding and exercisable in U.S. dollars (December 31, 2019: 1,219,276). These broker warrants expire between March 21, 2021 and November 6, 2025 (December 31, 2019: broker warrants had expiry dates between April 10, 2020 and March 21,2021).

Expiry date		**Exercise Price**	**Outstanding at December 31, 2019[1]**	**Issued**	**Exercised**	**Expired**	**Outstanding at December 31, 2020[1]**
April 12, 2020	$	9.00000	89,795	-	-	(89,795)	-
August 10, 2020	$	2.50000	537,570	-	-	(537,570)	-
March 21, 2021	$	3.40000	591,911	-	-	-	591,911
June 10, 2024	$	1.25000	-	1,260,000	-	-	1,260,000
March 27, 2025	$	0.21250	-	490,000	(335,650)	-	154,350
November 6, 2025	$	0.45335	-	386,015	(260,560)	-	125,455
Ending balance			**1,219,276**	**2,136,015**	**(596,210)**	**(627,365)**	**2,131,716**

Note 1 All broker warrants issued and outstanding are fully exercisable. All broker warrants issued, outstanding and exercisable are in U.S. dollars.

(In U.S. Dollars)

10. INCOME TAXES

(a) Current income taxes

Below is a reconciliation of combined federal and provincial corporate income taxes at the company's effective rate of 26.5% (2019: 26.5%).

	December 31, 2020	December 31, 2019
Net loss before income taxes	$ (24,184,657)	$ (41,907,079)
Income taxes at statutory rates	(6,408,934)	(11,105,376)
Tax effect of expenses not deductible for income tax purposes:		
Permanent differences	7,648,554	(4,800,780)
Unrecognized share issue costs	(129,264)	(625,220)
Tax / foreign rate changes and other adjustments	(49,409)	93,724
Total tax recovery	1,060,947	(16,437,652)
Tax recovery not recognized	(1,060,947)	16,437,652
	$ -	$ -

(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, 2020	December 31, 2019
Non-capital losses	$ 62,773,915	$ 63,740,497
Qualifying research and development expenditure	1,493,309	1,493,309
Share issue costs and other	1,868,633	1,999,584
Total tax assets	66,135,857	67,233,390
Tax assets not recognized	(66,135,857)	(67,233,390)
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)

10. INCOME TAXES (continued)

(c) Losses carried forward

The Company has non-capital losses of approximately $236,882,697 available to reduce future income taxes. The non-capital losses expire approximately as follows:

Expiry year	Non-capital losses
2031	$ 9,674,326
2032	10,454,774
2033	10,210,370
2034	13,784,437
2035	43,934,918
2036	28,260,911
2037	19,604,159
2038	40,239,997
2039	60,718,805
	$ 236,882,697

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, 2020, the Company has $1,167,560 (2019 - $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, 2020, the Company has $237,997 (2019 - $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.

11. COMMITMENTS

As part of its program of research and development of the Enos system, the Company has outsourced certain aspects of the design and development to third party technology and development companies. At December 31, 2020, $10,693,752 in purchase orders remain outstanding (December 31, 2019 - $1,327,294).

(In U.S. Dollars)

12. RELATED PARTY TRANSACTIONS

During the year ended December 31, 2020, 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 fair value, 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, 2020 amounted to $1,124,976 compared to $1,495,611 for the year ended December 31, 2019.

Common Shares Held by Directors and Officers	December 31, 2020		December 31, 2019	
	Number of shares	%	Number of shares	%
David McNally	4,167	0.01	4,167	0.01
Monique Delorme[1]	32,333	0.04	-	-
Perry Genova	514	0.00	-	-
Stephen Randall[2]	22,993	0.03	22,993	0.06
John Barker[3]	NA	NA	32,714	0.08
John Schellhorn[4]	NA	NA	294	-
Total	60,007	0.08	60,168	0.15
Common Shares Outstanding	**83,184,843**	**100.00**	**39,907,681**	**100.00**

1. Monique Delorme was appointed Chief Financial Officer on October 1, 2020.
2. Stephen Randall retired as Chief Financial Officer on September 30, 2020. He remains on the board of directors.
3. John Barker retired as directors effective September 30, 2020.
4. John Schellhorn retired as a director effective June 4, 2020.

13. 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, 2020, the Company had cash and cash equivalents of $25,468,805 (December 31, 2019: $814,492) to settle liabilities of $7,330,946 (December 31, 2019: $11,441,968) excluding warrant liabilities of $36,316,681 (December 31, 2019: $3,621,444).

13. FINANCIAL INSTRUMENTS (continued)

The Company currently does not generate any sales revenue. It generates interest income on its cash balances and revenue from its license and development agreements as described in note 2(n). The Company believes that with its current financial resources and expected revenues from license and development agreements, the Company expects to be able to continue operations for the foreseeable future. As at December 31, 2020, the Company is primarily dependent upon financing to fund its research and design relating to its Enos system and operating expenses.

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. 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 continue its technology development program and may be required to operate under a reduced 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 $161,549 (December 31,2019: $62,071) based on the current level of cash invested in cash equivalents.

A strengthening of the U.S. dollar at December 31, 2020, as indicated below, against current assets and accounts payable and accrued liabilities denominated in Canadian currency of CDN $366,767 (December 31, 2019: $556,276) and warrant liability of CDN $5,497,342 (December 31, 2019: $868,855) would result in increased equity and an increased profit for the year of $219,010 (December 31, 2019: $32,541) 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 sensitivity analysis is performed on the same basis for December 31, 2019.

(In U.S. Dollars)

13. FINANCIAL INSTRUMENTS (continued)

5% strengthening	December 31, 2020	December 31, 2019
Canadian dollar current assets	$ (7,659)	$ (19, 687)
Canadian dollar accounts payable and accrued liabilities	226,669	52,228
Change in profit (loss)	$ 219,010	$ 32,541

A weakening of the U.S. dollar against the Canadian dollar at December 31, 2020, and December 31, 2019, 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.

14. REVENUES

On June 3, 2020, the Company entered into a License Agreement with Medtronic, whereby the Company is providing exclusive access to certain IP rights relating to robotic assisted surgical technologies. The Company is accounting for the license fee at the point in time when the rights were transferred. The Company recognized revenue of $10 million under this agreement.

Technical Milestone under Medtronic Development and License Agreement

In 2020, the Company completed the first and second technical milestones under the Development Agreement with Medtronic (see note 7) and on October 28, 2020, received payment of $10 million. Revenue from the Development Agreement and the allocation of ownership and license rights developed under each milestone is recognized when the rights are granted, and customer acceptance is established. The Company is entitled to receive up to an additional $21 million under the Development Agreement with completion of milestones 3 and 4 in May and September 2020, respectively.

15. SEGMENTED REPORTING

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

16. CAPITAL MANAGEMENT

The Company's capital is composed of shareholders' equity. The Company manages its capital structure and adjusts it, based on the funds available to the Company, to support the development of its single access 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 access robotic surgical system. The Company has further progress to make in the development of the single access 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 access 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, 2020.

17. SUBSEQUENT EVENTS

(a) Warrants exercised

Subsequent to December 31, 2020, and as of February 20, 2021, 8,583,250 Common Shares were issued upon the exercise of warrants for gross proceeds of $9,166,500, and 732,375 Common Shares were issued upon the exercise of broker warrants for gross proceeds of $812,057. No material transactions relating to the exercise of warrants have occurred from the date of February 20, 2021, to the date of filing these consolidated financial statements.

(b) Options exercised

Subsequent to December 31, 2020, and as of February 20, 2021, 19,568 Common Shares were issued upon the exercise of options for gross proceeds of $14,285.

(c) Equity offerings

January 2021 Equity Offering

On January 26, 2021, the Company closed an offering of 6,451,613 units of the Company ("January 2021 Units") sold on a "bought deal" basis, at price of U.S. $1.55 per January 2021 Unit for aggregate gross proceeds of U.S. $10,000,000. ("January 2021 Offering"). The underwriter also exercised its over-allotment option for an additional 967,741 January 2021 Units and additional gross proceeds of U.S. $1,500,000. Each January 2021 Unit consists of one common share in the capital of the Company (each a "Common Share" and one half (1/2) of one Common Share purchase warrant (each whole warrant, a "January 2021 Warrant"). Each January 2021 Warrant is exercisable to acquire one Common Share at an exercise price of U.S. $2.00 per share until January 26, 2026. Pursuant to the underwriting agreement, the underwriter will receive: (i) a cash fee equal to 7% of the gross proceeds of the offering, (including January 2021 Units sold pursuant to the exercise of the overallotment option), each entitling the holder to acquire one Common Share at U.S. $1.9375 for a period of 24 months after the closing date.

The net proceeds from the January 2021 Offering will be used to fund the development of the Company's robotic surgical technologies and for general working capital.

An aggregate of 39,500 January 2021 Units was purchased by directors, officers and employees of the Company and its subsidiary under the offering for gross proceeds of $61,225. Each insider subscription constitutes a "related party transaction" pursuant to *Multilateral Instrument 61-101 – Protection of Minority Security Holders in Special Transactions* "MI 61-101"). In completing the purchases of January 2021 Units by the Company's insiders, the Company will rely on the exemptions from the formal valuation and minority shareholder approval requirements of MI 61-101, as the aggregate value of the purchases of the units does not exceed 25% of the market capitalization of the Company.

17. SUBSEQUENT EVENTS (continued)

February 2021 Equity Offering

On February 3, 2021, the Company entered into an underwriting agreement ("February 2021 Underwriting Agreement") in respect of a "bought deal" offering of 8,335,000 units of the Company ("February 2021 Units") at price of U.S. $2.40 per February 2021 Unit (the "Offering Price") for aggregate gross proceeds of U.S. $20,004,000 ("February 2021 Offering"). Each February 2021 Unit consists of one common share in the capital of the Company (each a "Common Share") and one half (1/2) of one Common Share purchase warrant (each whole warrant, a "February 2021 Warrant"). Each February 2021 Warrant will be exercisable to acquire one Common Share at an exercise price of U.S. $3.00 per share for a period of 24 months after the closing date. Pursuant to the underwriting agreement, the underwriter will receive: (i) a cash fee equal to 7% of the gross proceeds of the offering, (including February 2021 Units sold pursuant to the exercise of the overallotment option), and (ii) a number of broker warrants equal to 7% of the total number of February 2021 Units sold in the offering (including units sold pursuant to the exercise of the over-allotment option), each entitling the holder to acquire one Common Share at U.S. $3.00 for a period of 24 months after the closing date. The Company has granted the underwriter an option, exercisable in whole or in part and from time to time at any time until 30 days after the closing of the offering, to purchase up to an additional number of units equal to 15% of the number of February 2021 Units sold pursuant to the offering at the February 2021 Offering Price. The Offering is expected to close on or about February 23, 2021.A condition of the February 2021 Underwriting Agreement restricts the Company from issuing, without prior agreement from the underwriter, any Common Shares, or any securities convertible into or exchangeable for or exercisable to acquire Common Shares for a period commencing on the date of the February 2021 Underwriting Agreement and ending ninety (90) days following the closing date, except under pre-existing rights or obligations. This would include restricting the issuance of shares under the Second Aspire Agreement (see note 9).

The net proceeds from the February 2021 Offering will be used to fund the development of the Company's robotic surgical technologies and for general working capital.

TITAN MEDICAL INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE YEAR ENDED DECEMBER 31, 2020

(IN UNITED STATES DOLLARS)

This Management's Discussion and Analysis ("MD&A") is dated February 20, 2021.

Introduction

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 Company's fiscal year ended December 31, 2020 (the "2020 Fiscal Year") (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.

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 "expect", "anticipate", "estimate", "may", "could", "might", "will", "would", "should", "intend", "believe", "target", "budget", "plan", "strategy", "goals", "objectives", "predicts"; "potential", "projects", "possible", "milestones", "projection" or the negative of any of these words and similar expressions are intended to identify forward-looking statements, although these words may not be present in all forward-looking statements. Forward-looking statements that may appear in this MD&A include statements concerning:

- the Company's ability to raise sufficient financing on a timely basis, and attract and retain qualified personnel;
- the adverse impact on the Company's contractors and suppliers' ability to meet their obligations to the Company as a result of COVID-19;
- The Company's business consists of the design and development of robotic-assisted surgical technologies for application in MIS and is presently focused on the development of the Enos™ robotic single access surgical system (the "Enos system") and development under the Development Agreement (as defined herein);
- the Enos under development includes a surgeon-controlled patient cart that includes a 3D high-definition vision system and multi-articulating instruments for performing minimally invasive surgery ("MIS") procedures;

- the Enos system under development includes a surgeon workstation that provides the surgeon with an ergonomic interface to the patient cart and a 3D high-definition view of the MIS procedures;
- the Company's intent to initially pursue gynecologic surgical indications for use of its Enos system;
- the Company's plan to continue development of a robust training curriculum and post-training assessment tools for surgeons and surgical teams;
- the Company's 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;
- the Company's post-training assessment will include validation of the effectiveness of those assessment tools;
- the Company's filing and prosecution of patents will validate the novelty of its unique technology and support the value of the entire franchise;
- the performance of human surgeries with the Enos system will require an Investigational Device Exemption ("IDE") from the Food and Drug Administration ("FDA"), which must be submitted and approved in advance;
- the need for further Good Laboratory Practice ("GLP") and human factors evaluation ("HFE") preclinical studies to demonstrate the safety and performance of the system prior to proceeding with IDE clinical studies;
- 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;
- that an application to the IRB of each hospital will be made once the FDA has approved the Company's IDE application;
- the Company will likely proceed with a De Novo classification request for the Enos system, while continuing to evaluate its options for use of the 510(k) submission pathway;
- the Company's intention to continue with the De Novo classification process if the 510(k) pathway is not available to the Company;
- the outcome of any review by the FDA and the time required to complete activities necessary for regulatory approval or clearance;
- the Company's plan to file one or more additional Pre-Submissions with the FDA to allow it to review specific aspects of the design of the Company's surgical system, the intended use, and potential predicate devices, in order to clarify the requirements for the IDE clinical study protocol, confirm the appropriate regulatory pathway, and/or understand any additional special controls which the FDA may apply;
- the Company's ability to secure required capital to fund development and operating costs beyond 2022, in a timely manner;
- the Company has sufficient cash on hand to satisfy expected costs associated with the deliverables under Medtronic Milestone 3 and 4, as well as to satisfy the repayment of the Note when it becomes due;
- the Company may require additional funding to complete its submission of its application to the FDA for marketing authorization of its Enos system;
- the fact that the Company cannot produce an accurate estimate of the future costs of the development milestones and regulatory phases beyond the year 2022;
- 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, "Development Plan" and the footnotes thereunder;

- the indication of additional specific milestones as the development of the Enos system progresses;
- the Company's plans to design, create and refine software for production system functionality of the Enos system and the estimated incremental costs (including the status, cost and timing of achieving the development milestones disclosed herein);
- the Company's plan to further expand its patent portfolio by filing additional patent applications as it progresses in the development of robotic-assisted surgical technologies and, potentially, by licensing suitable technologies;
- the Company will receive a series of payments for Medtronic's license to robotic assisted surgical technologies;
- the Company's guidance on the regulatory process and the costs and time that may be involved, including whether it expects to or is required to proceed with a De Novo classification request;
- the Company's expectations with respect to its relationship with its suppliers and product development firms;
- the engagement of certain contractors and suppliers and the assurance that those parties will all be agreeable to engage throughout the project on terms satisfactory to the Company;
- the Company will gradually transition to the new Enos system brand identity, including on its website and in presentations and other corporate material;
- the Company will transition to an updated corporate brand identity that, while retaining the Titan Medical name, complements the Enos robotic single access surgical system;
- the Company's intentions to complete summative human factors studies and complete the design and development of the system and initiate clinical studies;
- the Company has sufficient capital on hand to complete Milestones 3 through 9 of the table noted under "Development Plan";
- the Company expects to be able to continue operations for 16 months and complete Milestones 3 through 14, with its current financial resources and the net proceeds from the February 2021 Offering;
- with the Company's current financial resources and the net proceeds from the February 2021 Offering, the Company expects to have the financial resources to be able to continue operations for 22 months and complete Milestones 3 through 16, if the Company achieves Medtronic Milestones 3 and 4 and receives the payments from Medtronic in respect of those milestones;
- the expected closing date of the the February 2021 Offering;
- the surgical indications for, and the benefits of, the Enos system;
- the Company's seeking of licensing opportunities to expand its intellectual property portfolio;
- the Company's industry and the markets in which it plans to operate or seeks to operate, including its general expectations and market position, market opportunities and market share;
- the Company's ability to arrange further financing;
- the Company's intention to confirm with the FDA the relevant regulatory pathway through the Pre-Submission process, and to initiate planning for the implementation of its IDE clinical studies;

- the Company's expectation to implement improvements to its instruments, end-effectors and cameras and related modifications to the central unit of the patient cart, and complete software development for its Enos system; and
- 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.

Forward-looking statements are statements about the future and are inherently uncertain, and actual results of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, including those referred to in this MD&A. These risks include, but are not limited to:

- dependency on additional financing;
- the Medtronic Loan (as defined herein) and the Note (as defined herein) may limit or preclude the Company from arranging further debt 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 the Enos 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;
- 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;
- the possibility of delisting from the Nasdaq or TSX exchanges;
- reduced disclosure requirements applicable to "emerging growth companies";
- cyber-security risks and threats;
- adverse impact on the Company's financial condition and results of operations as a result of COVID-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-assisted 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.

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

- general business and current global economic conditions;
- future success of current research and development activities;
- achieving development milestones;
- inability to achieve product cost targets;
- competition;
- potential changes to regulatory clearance processes in the United States and Europe;
- changes to tax rates and benefits;
- the availability of financing on a timely basis;
- the Company's and competitors' costs of production and operations;
- the Company's ability to attract and retain skilled employees;
- the Company's ongoing relations with its third-party service providers;
- the design of the Enos system and related platforms and equipment;
- the progress and timing of the development of the Enos system;
- costs related to the development of the Enos system;
- receipt of all applicable regulatory approvals/clearances;
- estimates and projections regarding the robotic-assisted surgery equipment industry;
- protection of the Company's intellectual property rights;
- market acceptance of the Company's systems under development;
- the Company's ability to meet the continued listing standards of Nasdaq and the TSX; and
- the type of specialized skill and knowledge required to develop the Enos system and the Company's access to such specialized skill and knowledge.

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

Please also refer to the risk factors set forth in the Company's annual report on Form 20-F for the 2019 fiscal year, (the "Annual Report") available on SEDAR at www.sedar.com, which are expressly incorporated by reference into this MD&A.

In addition to the risk factors listed above and those incorporated by reference in this MD&A, the Company is also subject to the following risks:

Development Agreement & License Agreement with Medtronic

On June 3, 2020, the Company entered into a development and license agreement (the "Development Agreement") with a U.S. affiliate of Medtronic in connection with the development of robotic assisted surgical technologies and a separate license agreement (the "License Agreement") with Medtronic in respect of certain already developed Company technologies.

There is no assurance that the Company will receive certain payments from Medtronic pursuant to the Development Agreement. On June 10, 2020, the Company received a $10 million license payment pursuant to the License Agreement and on October 28, 2020, the Company received a further license payment of $10 million for completion of Medtronic Milestone 1 pursuant to the Development Agreement. The Company's entitlement to receive up to an additional $21 million pursuant to the Development Agreement is conditional upon the completion of Medtronic Milestones 3 and 4 set forth in the Development Agreement.

The technology development described in Medtronic Milestones 3 and 4 involves complex electromechanical design and development and there is no assurance that the milestones will be satisfied on a timely basis or at all. The technology design and development require a combination of personnel with experience and expertise in robotic-assisted surgical technology and financial resources.

The Company is also dependent on the engagement of certain contractors and suppliers and there is no assurance that those parties will all be agreeable to engage throughout the project on terms satisfactory to the Company or at all.

Senior Secured Loan with Medtronic

The Medtronic Loan and the Note (as described below) may limit or preclude the Company from arranging further debt financing. Under the terms of the Note and related Security Agreement (as defined herein), the Medtronic Lender (as defined herein) has certain rights and powers that, if exercised, could have a material adverse effect on the Company's business. Due to the senior ranking of the Medtronic Lender's security interest in all of the Company's assets under the Security Agreement, the Company may be limited in, or entirely precluded from, granting a security interest in its assets in support of any further debt financing the Company may seek from any other lender, unless the security interest under the further debt financing is subordinate to the Medtronic Lender's security interest or the Medtronic Loan and the Note is paid in full satisfaction as permitted therein.

In the event the Company does proceed with a De Novo classification submission, additional resources, costs and time may be required for the Company to seek regulatory approval or clearance. Until the Company further communicates with the FDA through one or more submissions and receives feedback from the FDA, the Company cannot provide additional guidance on the regulatory process and the additional costs and time that may be involved, including whether it will ultimately proceed with a De Novo classification submission.

Disclosure Controls and Procedures and Internal Control Over Financial Reporting

The Company identified material weaknesses in its internal controls over financial reporting ("ICFR") in the course of the preparation of its financial statements in respect of the fiscal year ended December 31, 2020 prior to the approval of the financial statements by the Company's audit committee and board or directors and prior to their filing or other public disclosure. If the Company fails to maintain effective ICFR, this may adversely affect the accuracy and reliability of its financial statements and it could impact its reputation, business and the price of the Company's common shares (the "Common Shares"), as well as lead to a loss of investor confidence.

The Company has concluded that, as of December 31, 2020, the Company's ICFR was not effective due to a material weakness. The Company experienced significant and rapid change during the 2020 fiscal year as a result of the establishment of a new research and development facility, the augmentation of its development team, new arrangements with external development firms and the transition arising from the retirement of the Company's former Chief Financial Officer and the appointment of its new Chief Financial Officer as well as changes in the Company's financial accounting and reporting personnel. The Company's continuous risk assessment process was not effective in responding to the rapid rate of change in personnel and new business developments and the Company did not have sufficient human resources available to adequately assess risk and reinforce or strengthen controls in the requisite timeframe. Prior to presentation of its financial statements for their approval by the Company's audit committee and board of directors, the Company determined that it would adjust its consolidated annual financial statements as at and for the year ended December 31, 2020 with respect to expense recognition to correct errors in the calculation of asset and liability balances and the appropriate IFRS application and disclosure required for an amendment of a contract with an external development firm.

There can be no assurance that the Company will be able to successfully remediate the identified material weaknesses, or that it will not identify additional control deficiencies or material weaknesses in the future. If the Company is unable to successfully remediate its existing or any future material weaknesses in its ICFR, the accuracy and timing of the Company's financial reporting may be adversely affected, the Company may be unable to maintain compliance with securities laws and Nasdaq listing requirements regarding the timely filing of periodic reports, investors may lose confidence in the Company's financial reporting and the price of its Common Shares may decline.

The accuracy of the Company's financial statements and related disclosures could be affected if the judgements, assumptions or estimates used in the Company's critical accounting policies are inaccurate.

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.

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.

On May 29, 2020 the Company established Titan Medical USA Inc. ("Titan USA" or "Subsidiary"), a Delaware corporation and a wholly owned subsidiary of the Company. Titan USA's principal activity consists of research and development from its premises located in Chapel Hill, North Carolina, United States.

Company Overview

The Company's business consists of the design and development of robotic-assisted surgical technologies for application in MIS and is presently focused on the development of the Enos™ robotic single access surgical system (the "Enos 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 ergonomic interface to the patient cart and a 3D high-definition view of the MIS procedure. The Company intends to initially pursue gynecologic surgical indications for use of its Enos system.

Development of the Enos system has 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 comprised of surgeons who specialize in MIS. This approach has positioned the Company to design a robotic surgical system intended to include the traditional advantages of robotic-assisted 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 ergonomic user interface and a patient cart facilitating the use of instruments with enhanced dexterity.

The Enos 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 an 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 of the MIS surgical site for optimal positioning of the insertion tube. Once the insertion tube is positioned in the body, it is docked to a central drive unit of the patient cart and the 3D high-definition endoscopic camera is subsequently 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 facilitate an assortment of permanent and detachable single patient use end effectors. The use of reusable (for a specific number of uses) robotic instruments that can be cleaned and sterilized between surgeries is intended to minimize the cost per procedure without compromising surgical performance. The design of the patient cart also incorporates multiple mechanical elements including a mast, a boom and wheels, allowing 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 the Enos system, the Company plans on the continued development of a robust training curriculum and post-training assessment tools for surgeons and surgical teams. The 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 an initial set of core surgical skills simulation modules customized for use with the surgeon workstation in the first phase of the comprehensive surgeon training curriculum that the Company plans for its Enos system.

The Company continuously evaluates its technologies under development for intellectual property protection through a combination of trade secrets and patent application filings. The Company has focused on the filing and prosecution of patents that management believes validate the novelty of its unique technology, and in turn, support the value of the entire franchise.

Regulatory Overview

The Company has used a combination of internal and external resources, including specialized product development firms, to execute the research, development and regulatory plans for the Enos system. Development objectives have been established to support a planned regulatory submission to the FDA for marketing authorization in the U.S., and submittal of a Technical File to a European Notified Body to obtain CE marking, which indicates that a product for sale within the European Economic Area has been assessed to conform to health safety and environmental protection requirements.

In the U.S., the regulatory clearance process includes a Q-Submission (known as a Q-Sub) Program that provides companies an opportunity to interact with and obtain feedback from the FDA on specific aspects of the regulatory process, requirements and planned submissions including IDE applications, 510(k) applications and De Novo classification requests. Certain Q-Submissions, termed Pre-Submissions (known as Pre-Subs), typically include a request for written feedback, and if a company chooses, a meeting in which additional feedback and findings are documented in meeting minutes. The recommendations made by the FDA in response to a Pre-Submission are non-binding on the FDA, and circumstances related to a company's product or potential risks identified through post-market surveillance of similar products in clinical use may further change the position of the FDA. Furthermore, while the FDA encourages Q-Submissions, there is no assurance that feedback provided from these communications will result in regulatory approval or clearance, nor does it preclude any identified future changes in regulatory pathways.

The Company has established its plans for development and commercialization based on its expectation that the Enos system will be classified as a Class II device and therefore obtain marketing authorization through (i) a premarket notification submitted in accordance with section 510(k) of the U.S. Federal Food, Drug and Cosmetic Act (the "FD&C Act"), commonly known as a 510(k) submission, or (ii) a classification request for novel devices in accordance with section 513(f)(2) of the FD&C Act, commonly known as a De Novo classification submission. While the Company had previously confirmed with the FDA that the Enos system would be suitable for marketing authorization through a 510(k) submission, it recently obtained a written response (the "Written Response") from the FDA to its Request for Information in accordance with section 513(g) of the FD&C Act that indicates the FDA believes, based on information provided to it, that the Enos system is appropriate for classification through the De Novo submission pathway.

Requests for Information made pursuant to Section 513(g) of the FD&C Act require the FDA to provide information about the classification and the regulatory requirements that may be applicable to a particular device. FDA responses to such requests represent the FDA's best judgement about how a device would be regulated, based upon review of information provided by a requester, including the description of the device and its intended use. The FDA's response to a 513(g) request is not a classification decision for a device and does not constitute FDA clearance or approval for commercial distribution. Classification decisions and clearance or approval for marketing require submissions under different sections of the FD&C Act, such as a classification obtained in response to a 510(k) submission or a De Novo submission.

The Company filed the Request for Information in response to communications the Company had with the FDA in which the FDA raised the question of whether robotically-assisted surgical devices ("RASD"), would generally continue to be eligible for classification as Class II devices and the 510(k) submission pathway, or whether De Novo submissions would be more appropriate for such devices. In view of the FDA's Written Response and other information currently available to the Company, the Company will likely proceed with a De Novo classification request for the Enos system, while continuing to evaluate its options for use of the 510(k) submission pathway. If the Company ultimately determines that the 510(k) submission pathway is not available to the Company or would otherwise present other difficulties, the Company intends to continue with the De Novo classification process.

The De Novo classification request provides a pathway for the FDA to classify novel medical devices for which general controls, or general and special controls, provide a reasonable assurance of safety and effectiveness, but for which there is no legally marketed predicate device. The De Novo process allows the FDA to review a company's submission and reasons as to why the device should be a Class II device, including the review of the general and special controls that would provide reasonable assurance of the safety and effectiveness of the device. Included in such a classification request, clinical, non-clinical, test and design data may be provided to support a company's recommendation for the classification of the device as a Class II device. After the FDA receives and reviews a request, a determination (generally within 150 days) is made to either grant or decline the request. If the request is granted, (i.e. the device is determined to be a Class II device), the device is authorized to be marketed and a new classification regulation will be established, ultimately allowing the novel device to serve as a predicate for 510(k) submissions of future devices of the same type. Should the De Novo classification request be declined, and the device is therefore classified as a Class III device, a premarket approval application under section 515 of the FD&C Act, also known as a PMA, would be required to market the device, involving a more expensive and time-consuming approval process.

Since the Enos system is presently under development and the Company has not submitted any regulatory applications, it is not possible to predict with certainty the outcome of any review by the FDA and the time required to complete activities necessary for regulatory approval or clearance is not quantifiable at this time. Accordingly, the Company plans on further communications and submissions with the FDA to clarify the requirements for the IDE clinical study protocol and to understand any special controls which the FDA may apply. The FDA's most recent review and response to the Company's proposed IDE clinical study general design and planning occurred in December 2018. Additional Pre-Submissions would allow the FDA to review the state of the current design of the surgical system, and the inclusion of test data and more detailed proposals for one or more clinical protocols would allow the FDA to provide additional feedback and/or suggest modifications.

The performance of human surgeries as part of the proposed clinical study with the Enos 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. Application to the IRB of each hospital can be made once the FDA has approved the Company's IDE application. Only upon successful completion of the IDE clinical study will the Company be in a position to submit to the FDA an application for marketing authorization.

Previous results achieved by surgeons in operating prototypes in animal and cadaver studies have preliminarily validated the potential for single incision surgeries to be performed with the Enos system. Insights gained from these preclinical studies have directed the Company to make product improvements. In June 2019, the Company commenced preclinical live animal and cadaver studies according to Good Laboratory Practice ("GLP") for FDA submittal and subsequently, on July 18, 2019, announced the successful completion of GLP surgical procedures necessary for the planned IDE application to the FDA. Following the completion of the GLP procedures, the Company proceeded to complete human factors evaluation ("HFE") studies, which included verification of production system operation with clinical experts under rigorous formal (summative) HFE studies under simulated robotic manipulation exercises. During the third quarter of 2019, the Company's European Notified Body also completed audits of the Company's quality system procedures and related documentation for ISO 13485 Certification, which was ultimately received in January 2020. In September 2020, a surveillance audit of the Company's quality system was successfully completed by the Company's Notified Body.

Development Plan

Notwithstanding the preclinical successes achieved in 2019, during the second half of 2019, the Company experienced a severe cash shortfall and as a result, suspended all development work on the Enos system. Following a series of successful capital raises in the first half of 2020, the Company resumed product development and moved to enhance its internal development program through the establishment of a wholly-owned subsidiary, Titan USA, located in Chapel Hill, NC.

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, actual costs and development times will exceed those published by the Company in its continuous disclosure documents in years prior to 2020. An estimate of the future costs of the development milestones and regulatory phases for the Enos system beyond the year 2022 is not possible at this time.

The Company's estimates of the costs and timelines for the development milestones of its Enos system through the fourth quarter of 2022 are as set out in the table below:

Milestone Number	*Development Milestones*	*Estimated Cost (US million $)*[1]	*Schedule for Milestone Completion*	*Comments*
Milestone 1	Design, prototype and test improvements to instruments, cameras and CDU	3.2	Q4 2020	Completed
Milestone 2	Launch rebranded product line including logos with trademark pending, literature and presentation templates and new website	0.3	Q4 2020	Completed
Milestone 3[4]	Iterate electromechanical design, update sterile adaptors and drape	5.2	Q1 2021	-
Milestone 4[4]	Perform additional software development and test system performance	5.4	Q1-Q2 2021	-
Milestone 5	Perform animal lab assessment	0.1	Q2 2021	-
Milestone 6[4]	Perform biocompatibility testing of instruments, camera systems and accessories at independent lab	3.8	Q2 2021	-
Milestone 7[4]	Perform electrical safety testing for surgeon workstations and patient cart, including electromagnetic compatibility (EMC) and electromagnetic interference (EMI) tests at independent lab	2.7	Q3 2021	-
Milestone 8[4]	Perform animal feasibility or GLP study	2.8	Q3 2021	-

Milestone 9[2]	Complete initial build of Enos system IDE units	10.2	Q4 2021	-
Milestone 10[2][4]	Complete system verification testing	3.3	Q4 2021	-
Milestone 11[2][4]	Complete HFE summative testing	1.9	Q4 2021	-
Milestone 12	Update application for IDE as additional testing lab data is received and continue preparation for human confirmatory studies	6.0	Q1 2022	-
Milestone 13	Submit IDE application to FDA			
Milestone 14	Complete secondary build of Enos system IDE units			
Milestone 15	Initiate IDE clinical study	19.0	Q2-Q4 2022	-
Milestone 16	Complete IDE clinical study, data analysis and final report			
Milestone 17[3]	Submit application for FDA marketing authorization	TBD	TBD[5]	-
Milestone 18	Tentative FDA marketing authorization letter	TBD	TBD	-

Notes:

1. The estimated costs above include an allocation of $1.8-2.8 million per quarter of general and administrative costs.
2. Milestones 9, 10 and 11 are expected to be executed during the fourth quarter of 2021 with their projected completion in December 2021. If the Company achieves Medtronic Milestones 3 and 4, it will be entitled to receive the corresponding payments from Medtronic of $10 million and $11 million, respectively, and assuming the completion of the February 2021 Offering, in those circumstances the Company estimates that it will have sufficient funds for the execution and completion of Milestones 9, 10 and 11. If the Company does not achieve Medtronic Milestones 3 and 4, the Company will need to raise additional capital to complete Milestones 10 and 11.
3. The Company anticipates proceeding with FDA marketing authorization as described in the section titled "*The Business – Regulatory*".
4. The costs of Milestones 1 through 11 are forecasted to total $38.9 million, a net increase of $1.6 million from amounts previously forecasted and published in the Company's Management Discussion and Analysis dated November 16, 2020. The increase is primarily related to general and administrative costs, enhancing internal R&D capabilities and other general R&D related costs.
5. The timing of submittal of application for FDA marketing authorization will be determined at a future date, upon completion of IDE clinical studies and following further correspondence with the FDA as described in the section titled "*The Business – Regulatory*".

Due to the nature of technology research and development, there is no assurance that the milestones set forth in the table above will be achieved, and there can be no assurance with respect to the time or resources that may be required to achieve them. The Company expects that additional specific milestones could be identified in the course of the development of the Enos system, and existing milestones, budgets and the schedule for completion of each milestone may change depending on a number of factors including the results of the Company's development program, clarification of or changes to regulatory requirements, the availability of financing and the ability of development firms engaged by the Company to complete work assigned to them.

Intellectual Property and Licensing

The Company's patent portfolio has expanded from 12 issued patents at December 31, 2016 to 70 issued patents and 85 patent applications as of January 31, 2021. 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.

Pursuant to a License Agreement entered into with Covidien LP, a wholly owned subsidiary of Medtronic plc ("Medtronic"), on June 3, 2020, the Company has exclusively licensed a portion of its portfolio to Medtronic, while retaining the world-wide rights to commercialize the licensed technologies for the Company's own business in single access robotic assisted surgery, including the Enos system. Furthermore, pursuant to a Development and License Agreement entered into by the Company with Medtronic on June 3, 2020, the Company will develop certain robotic assisted surgery technologies, that if successfully completed and verified, will be exclusively licensed by Medtronic for license payments of up to $31 million, of which $10 million has already been received by the Company for completion of Medtronic Milestone 1, and a further $21 million will be eligible for receipt upon completion of Medtronic Milestone 3 and Medtronic Milestone 4. The Company would retain the world-wide rights to commercialize the developed technology in its own business, including for use with the Enos system. See "Medtronic" under "Recent Developments".

Operations

The Company maintains its head office at subleased premises in Toronto, Ontario, Canada. During the third quarter of 2019, the Company entered into a lease for premises in Chapel Hill, North Carolina, USA. During the second quarter of 2020, the Company incorporated Titan USA, as a wholly owned subsidiary of the Company, under the General Corporation Law of the State of Delaware and assigned the lease to the new subsidiary. On October 16, 2020, Titan USA entered into a lease amending agreement to expand its premises in Chapel Hill, North Carolina, USA to accommodate the growth in its development team.

The development of both the Enos system and the development work pursuant to the Medtronic development and license agreements (See "*Medtronic*" under "*Recent Developments*") are managed and directed by Titan USA from the Chapel Hill, North Carolina facility. In addition to Titan USA employees, the Company engages subcontractors and consultants to perform design and development, prototyping and manufacturing.

Recent Developments

On June 3, 2020, the Company entered into the Development Agreement with Medtronic in connection with the development of robotic assisted surgical technologies and the separate License Agreement with Medtronic in respect of certain of the Company's already developed technologies.

The Development Agreement provides for the development of robotic assisted surgical technologies for use by both Titan and Medtronic in their respective businesses through the granting of certain licenses to the intellectual property developed thereunder. In addition to retaining certain rights to commercialize the developed technologies, the Company has received a $10 million payment for the completion of Medtronic Milestone 1 and is eligible to receive additional payments totaling up to $21 million upon the successful completion of Medtronic Milestone 3 and Medtronic Milestone 4. The payments are to be provided as technology milestones are completed and verified and are further identified in the table below. The Development Start Date was June 12, 2020.

Medtronic Milestone(1)	**Deadline**(2)	**Payment (US$)**(3)
Medtronic Milestone 1	Four (4) months from Development Start Date(4) (5)	$10,000,000
Medtronic Milestone 2(6)	Four (4) months from Development Start Date	-
Medtronic Milestone 3	Six (6) months from the later of (a) receipt by us of Payment for Medtronic Milestone 1, (b) receipt by us from Medtronic of Medtronic deliverables required for Medtronic Milestone 3, and (c) receipt by us from Medtronic of confirmation of certain due diligence in respect of our deliverables for Medtronic Milestone 1	$10,000,000
Medtronic Milestone 4	Four (4) months from the later of (a) receipt by us of Payment for Medtronic Milestone 3, (b) receipt by us of Medtronic deliverables for Medtronic Milestone 4, and (c) receipt by us from Medtronic of confirmation of certain due diligence in respect of our deliverables for Medtronic Milestone 3	$11,000,000 (7) (8)

Notes:

1. Medtronic Milestone 1, Medtronic Milestone 3 and Medtronic Milestone 4 are each defined in the Development Agreement and consist of the completion of the development of certain robotic assisted surgical technologies as described in the Development Agreement.
2. All as further described and qualified in the Development Agreement.
3. Each payment is conditional upon the corresponding milestone being completed on a timely basis. As of the date of this document, Medtronic Milestone 1 has been achieved.
4. "Development Start Date" has the meaning ascribed to it in the Development Agreement and as set out above.
5. As of the date of this document, Medtronic Milestone 1 has been achieved on schedule and payment was received.
6. Medtronic Milestone 2 is a non-technology milestone defined as Titan raising at least $18,000,000 of capital between the effective date of the Development Agreement and the date that is four months from the Development Start Date. Medtronic Milestone 2 was achieved ahead of the deadline in June 2020.
7. The amount of the payment will be the sum of $10,000,000 and the amount of certain legal, transaction and intellectual property related expenses to be paid to the Company up to a maximum of $1,000,000 pursuant to the Development Agreement and License Agreement.
8. The balance outstanding under the Medtronic Loan (described below) will be offset against the payment for Medtronic Milestone 4.

The Development Agreement provides that a steering committee comprising an equal number of representatives from Titan and Medtronic shall be established to provide oversight regarding the work toward achievement of the milestones. Either party may terminate the agreement if the other party materially breaches the agreement and (if the breach is curable) fails to cure the breach within forty (40) business days after receipt of written notice.

Under the terms of the License Agreement, Titan granted Medtronic an exclusive license with regard to certain robotic assisted surgical technologies, including patents and know-how, for a one-time upfront royalty payment of $10 million with no further royalty payments due thereunder. Titan has retained certain rights to the licensed technologies to continue to develop and commercialize those technologies for the Company's own business in single access robotic assisted surgery, including the Enos system.

On April 28, 2020, Titan received gross proceeds of $1.5 million from a senior secured loan (the "Medtronic Loan") provided by an affiliate of Medtronic plc ("Medtronic Lender"). The Medtronic Loan is evidenced by an amended and restated senior secured promissory note ("Note") dated June 3, 2020, in the principal amount of $1.5 million plus an amount equal to certain legal, transaction and intellectual property related expenses incurred by Medtronic and will bear interest at the rate of 8% per annum. The unpaid principal balance owing under the Note, together with any accrued and unpaid interest and all other unpaid obligations under the Note, shall be due and payable in full on the earliest to occur of: (i) June 4, 2023, (ii) the completion of the last milestone under the Development Agreement, or (iii) a Change of Control (as defined in the Note), subject to an accelerated due date under certain adverse conditions. Until repayment of the loan, Medtronic may have one non-voting observer attend meetings of Titan's Board of Directors.

Medtronic Senior Security

Titan has entered into a security agreement dated April 28, 2020 in favor of Medtronic Lender (the "Security Agreement") pursuant to which Titan has granted to Medtronic Lender a security interest in all of the Company's present and future property including all personal property, inventory, equipment and intellectual property. In addition, Medtronic Lender's rights and powers under the Security Agreement include without limitation (a) exercising and enforcing all rights and remedies of a holder of collateral as if Medtronic Lender were the absolute owner of the collateral, (b) collection of any proceeds arising in respect of all of our property pledged as security for the loan, (c) license or sublicense, whether on an exclusive or nonexclusive basis, of any of our intellectual property for such term and on such conditions and in such manner as Medtronic Lender in its sole judgement determines (taking into account such provisions as may be necessary to protect and preserve such intellectual property), and (d) the right to enforce its security in the event of a default which may include the appointment of a receiver by instrument or order of the court.

Regulatory

The Company has not completed any regulatory submissions for marketing authorization, including a 510(k) submission or a De Novo classification submission with the FDA, and will not be in a position to do so in the foreseeable future. Further, it is not possible to predict with certainty the outcome of any regulatory agency review upon submission and the effect of that outcome on the time required to complete activities required for regulatory approval or clearance. The Company has recently received the Written Response from the FDA that indicates the FDA believes, based on information provided to it, the Enos system is appropriate for classification through the De Novo submission pathway. The Company plans on further communications and submissions with the FDA to clarify the requirements for planned IDE clinical studies, and any special controls which the FDA may apply, including those that are deemed applicable to RASDs in general. In view of the FDA's Written Response and other information currently available to the Company, it does not appear that the FDA will continue to allow the use of the 510(k) submission pathway for any new RASDs, where device manufacturers can demonstrate that the new device is substantially equivalent to a legally marketed predicate RASD device. Accordingly, the Company will likely proceed with a De Novo classification request, while continuing to evaluate its options for use of the 510(k) submission pathway.

In the event the Company does proceed with a De Novo classification request, additional overall resources, costs and time will likely be required for the Company to proceed with seeking regulatory approval or clearance. While the Company, in view of information currently available to it, does not anticipate any material impact on the milestones and budgets for 2021, until the Company further communicates with the FDA through one or more Q-Submissions and receives feedback from the FDA, the Company cannot provide additional guidance on the regulatory process and the costs and time that may be involved.

Supplier Agreement

On April 30, 2020, the Company reached an agreement with one of the product development firms (the "Supplier") engaged by the Company for the payment of outstanding payables to be settled in full by the end of 2020. On October 13, 2020, the Company entered into a second agreement with the Supplier, pursuant to which the Supplier has extended the time for payment of the outstanding amounts owed by the Company to the end of the first quarter of 2021.

Pursuant to the second agreement, the Company paid a monthly amount of $250,000 from October through December 2020, a lump sum payment of $2,299,682 in December 2020, $750,000 in January 2021 and will pay a monthly amount of $750,000 in each of February and March 2021. These payments will be applied toward settling the outstanding amounts owed. Assuming successful completion of conditions under the second agreement, the Company is not expected to incur interest on the outstanding amounts after December 2020, and $673,000 of accrued interest is to be forgiven. A gain on settlement related to the accrued interest has been recognized in the quarter ended December 31, 2020.

Naglreiter Settlement Agreement

On June 8, 2020, the Company entered into a settlement agreement with Naglreiter Consulting, LLC ("Naglreiter") to settle claims in a lawsuit pending in the United States District Court for the Southern District of Florida. Under the terms of the settlement agreement, the Company paid Naglreiter the sum of $1,050,000 and Naglreiter returned to the Company certain personal property and related electronic data in its possession, and the pending litigation was dismissed. The Company recognized a gain on settlement of $1,839,626 in the year.

Nasdaq

On August 5, 2020, the Company received notification from Nasdaq that, based on the closing bid price of its Common Shares for the last 30 consecutive business days, it was not in compliance with the requirement to maintain a minimum bid price of $1 per share. On December 24, 2020, the Company received notification from Nasdaq that the Company had cured the bid price deficiency and had regained full compliance with all applicable criteria for continued listing and trading on Nasdaq.

New Branding Initiative

On September 21, 2020, the Company announced the launch of a new name and brand identity for its robotic surgical system under development, the Enos robotic single access surgical system. During the ensuing weeks, the Company gradually transitioned to the new Enos system brand identity, including on its website and in presentations and other corporate material. Along with the change to the identity of its surgical system, the Company will transition to an updated corporate brand identity that, while retaining the Titan Medical name, complements the Enos robotic single access surgical system.

Office Lease

On October 16, 2020, Titan USA entered into a lease amending agreement with a third party to lease certain office space in Chapel Hill, North Carolina. The term of the amended lease is 55 months and the average base monthly rent is $10,628. Upon commencement on November 1, 2020, the Company recognized a right of use asset and a lease liability as required under IFRS 16.

Disclosure Controls and Procedures and Internal Control Over Financial Reporting

Management has designed, or caused to be designed under their supervision, the Company's disclosure controls and procedures to provide reasonable assurance that all relevant information is gathered, recorded, processed, summarized and reported to the Chair / Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO") of the Company so that appropriate decisions can be made within the time periods specified in securities legislation regarding public disclosure by the Company in its annual filings, interim filings or other documents or reports required to be filed or submitted by it under securities legislation.

Management has also designed internal controls over financial reporting ("ICFR") to provide reasonable assurance regarding the reliability of the Company's financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Because of its inherent limitations, ICFR can provide only reasonable assurance and may not prevent or detect misstatements. Further, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

The CEO and CFO evaluated the effectiveness of the Company's internal controls over financial reporting as at December 31, 2020 and identified the material weaknesses outlined below. The Company plans to address these weaknesses in 2021.

Identified Material Weakness and Remediation Plan

According to the Public Company Accounting Oversight Board (PCAOB) Auditing Standard No. 5, a material weakness is a deficiency or a combination of deficiencies in internal controls over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

During the preparation of its financial statements for the year ended December 31, 2020, management became aware of certain errors in the calculation of asset and liability balances and the appropriate IFRS application and disclosure required for an amendment to a contract with an external development firm. The errors were corrected in the Company's financial results for the three-months ended December 31, 2020.

The material weaknesses identified are:

a) The Company did not have sufficient accounting resources with relevant technical accounting skills to address issues relating to the assessment of IFRS treatment for complex accounting issues, specifically relating to a material amendment to a contract with an external development firm;

b) The Company did not have sufficient accounting resources with relevant technical accounting skills to address and review issues relating to the valuation of warrant liabilities;

c) The Company did not sufficiently design internal controls to provide the appropriate level of oversight regarding the financial recordkeeping and review of the Company's cut-off procedures as they relate to accounts payable and valuation of supplier liabilities.

Remediation Plan for the Material Weaknesses

The errors identified were all non-cash items and were corrected in the financial statements for the year ended December 31, 2020 before they were approved by the Company's audit committee and filed or otherwise disclosed to the public.

The Company has been actively engaged in developing remediation plans to address the identified material weaknesses. The remediation efforts in process or expected to be implemented include the following:

a) Engagement of one or more qualified and independent consulting firms with subject matter experts to assist with the Company's internal accounting and reporting over complex accounting issues;

b) Institution of business systems to support the work associated with the valuation and reporting of the warrant liabilities and other equity-based securities;

c) Engagement of an external consulting firm to assist with increasing the Company's in-house resources to increase the number of qualified personnel involved in financial accounting and reporting.

Despite the material weaknesses, after adjusting the financial statements of the Company as at and for the year ended December 31, 2020 prior to their approval by the Company's audit committee, and filing in compliance with securities regulations or other public disclosure, the Company has concluded that the audited consolidated financial statements as at and for the year ended December 31, 2020 present fairly, in all material respects, the Company's financial position, results of operations, changes in equity and cash flows in accordance with IFRS.

As the Company continues to evaluate and work to improve its internal controls over financial reporting, the Company may determine to take additional measures to address the material weaknesses or determine to supplement or modify certain of the remediation measures described above.

Overall Performance

During the year ended December 31, 2020, the Company secured capital through issuances of equity, and a senior secured loan, receipt of a license payment and a payment related to milestones achieved under the Development Agreement from Medtronic. These cash inflows have allowed the Company to resume development activities through its subsidiary Titan USA, which began recruiting an in-house technical team to staff its new facility in Chapel Hill, North Carolina, while continuing to engage existing and new technical partners to support development plans.

In addition to resuming the development program relating to its Enos system, the Company is engaged in an additional development program pursuant to the Medtronic Development Agreement.

Following the resumption of development activities related to the Enos system in June 2020, the Company completed design enhancements to its multi-articulating instruments and end-effectors in view of the opportunities for improvements, with laboratory testing of prototypes to verify the improved design to follow. Further clinically inspired requirements for improvements to other aspects of the Enos system are being evaluated with the overall goal of improving operating efficiencies while aiming to reduce manufacturing costs. In particular, opportunities for improvement to the interfaces between the instruments, camera systems, and associated sterile interfaces to the CU of the patient cart are being considered. Based on the recent and anticipated improvements to the system and potential changes to the FDA requirements for data to be included in the IDE application, the Company is considering the need for further GLP and HFE preclinical studies in order to demonstrate the safety and performance of the system prior to proceeding with IDE clinical studies.

During the 2020 Fiscal Year, the Company raised aggregate gross proceeds of approximately $23,261,930 from financings ($21,009,224 net of closing costs and cash commissions), $2,492,727 from the exercise of 7,257,252 warrants, $189,464 from the exercise of 596,210 of broker warrants, and $1,150 from the conversion of 11,500,000 common share equivalents. The Company also received a loan from the Medtronic Lender in the amount of $1,500,000, evidenced by an 8% senior secured promissory note. During the 2020 Fiscal Year, the Company generated revenue of $10,000,000 from a license agreement and $10,000,000 from a development and license agreement with Medtronic (See "*Recent Developments*") resulting in a net and comprehensive loss of $24,184,657 for the year ended December 31, 2020, compared to a net and comprehensive loss of $41,907,079 for the year ended December 31, 2019. These figures included research and development expenditures of $7,937,171 for 2020 and $51,418,056 for 2019, as well as a gain on settlement of legal action of $1,839,626 and a gain of $673,000 recorded on the forgiveness of interest on the outstanding payables both in 2020, offset by a loss on change in the fair value of warrants of $27,855,678 in 2020 and a gain on change in change in fair value of warrants of $19,800,645 in 2019.

During the 2020 Fiscal Year, the Company had an increase in net cash flows of $24,654,313. This resulted from a use of cash from operating activities of $845,117, cash provided by financing activities of $26,098,798 from the issuance of equity, issuance of a note payable, repayment of lease liabilities, and cash used in investing activities of $599,368 from additions to patents and purchase of property, plant and equipment.

Selected Annual Information

The following table summarizes selected financial data reported by the Company for the years ended December 31, 2020, 2019 and 2018 in accordance with IFRS. The information set forth should be read in conjunction with the respective audited financial statements.

	2020	**2019**	**2018**
Net sales	$20,000,000	-	-
Net and comprehensive loss for the year	$24,184,657	$41,907,079	$22,639,272
Basic & diluted loss per share	$0.36	$1.37	$1.36
Total long-term liabilities	($750,791)	($8,001)	-
Total assets	$29,838,135	$3,381,581	$21,915,164

Significant changes in key financial data from 2019 to 2020 can be attributed to the receipt of proceeds of equity financing, the fluctuations of the fair value of warrants, expenditures in connection with the development of the Company's Enos system and the Company's work in connection with the Development Agreement with Medtronic.

Discussion of Operations

Significant changes in key financial data from the year ended December 31, 2019, through the year ended December 31, 2020, reflect the revenue recognition of the license payment pursuant to the Medtronic License Agreement and the first milestone payment under the Development Agreement as well as the previous suspension of development of the Company's Enos system while the Company sought additional capital. Also impacting these changes 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.

The Company incurred a net and comprehensive loss of $24,184,657 during the year ended December 31, 2020, compared to a net and comprehensive loss in 2019 of $41,907,079. The decrease in the loss in 2020 of $17,722,422 is primarily due to a decrease of $43,480,885 in research and development expenditures in 2020 offset by an increase of $47,656,323 in losses on the change in valuation of warrants less the $20,000,000 in revenues recorded in the year. Research and development expenditures for the year ended December 31, 2020, were $7,937,171, compared with $51,418,056 for the year ended December 31, 2019.

Total expenses incurred during the year ended December 31, 2020, were $17,054,432. At December 31, 2019, the Company had forecasted total expenses for 2020 to be approximately $38,756,000. The difference between the original forecast and actual expenses incurred is primarily related to reduced research and development expenses as a result of a decrease in available funding. The reduction in costs was approximately $21,702,000, or 56% of total expenses forecasted as of December 31, 2019.

Research and development expenditures (all of which were expensed in the period), for the years ended December 31, 2020, and December 31, 2019, respectively were as follows:

	Year Ended December 31, 2020	**Year Ended December 31, 2019**
Research and Development Expenditures	$ 7,937,171	$ 51,418,056

Research and development expenditures decreased considerably in the year ended December 31, 2020, compared to the same period in 2019. This decrease was primarily due to a decrease in available funding.

Other expenses, excluding the research and development expenses discussed above and excluding interest income, loss or 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, 2020, were $9,117,261, compared to $8,308,221 in 2019. The increase of $809,040 in 2020 is primarily attributable to an increase in amortization from new leases for the Company's newly-created subsidiary in Chapel Hill, North Carolina, interest charges from the Senior Secured Loan with Medtronic, interest charges from an agreement with the Supplier, and professional fees expensed in 2020; partially offset by lower consulting fees, stock-based compensation, and travel.

The Company realized $29,143 of interest income on its cash and cash-equivalent balances during the year ended December 31, 2020, and $115,584 for the same period in 2019. This decrease in interest income is primarily attributed to lower cash balances in its money market account in the first half of 2020 compared to 2019.

Warrant liability issue costs decreased to $1,816,316 for the year ended December 31, 2020, from $2,097,031 for the same period in 2019. The decrease in 2020 is attributed to a reduction of equity capital raised in 2020 and corresponding costs, compared to equity capital raised and corresponding costs for the year ended December 31, 2019.

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 non-cash effects of adjustments in the valuation of outstanding warrant liability.

For the quarter	Net sales	Net and comprehensive loss (gain) from operations	Basic and diluted (gain) loss per share
December 31, 2020	$10,000,000	$20,632,782	$0.25
September 30, 2020	-	$1,640,633	$0.02
June 30, 2020	$10,000,000	$1,143,199	$0.02
March 31, 2020	-	$768,043	$0.02
December 31, 2019	-	$(2,412,863)	$(0.07)
September 30, 2019	-	$1,564,196	$0.05
June 30, 2019	-	$14,472,866	$0.46
March 31, 2019	-	$28,282,880	$1.22

Significant changes in key financial data from the three months ended March 31, 2019, through the three months ended December 31, 2020, reflect the ongoing development of the Company's Enos 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 2020, the Company had net and comprehensive loss of $20,632,782 compared to net and comprehensive gain of $2,412,863 for the same period in 2019. The change of $23,045,645 is primarily attributed to an increase in loss on fair value of warrants in the same period of $29,841,818, and an increase of $3,425,325 in research and development expenses during the period after the Company secured additional financing, offset by $10,000,000 revenue from the License and Development Agreements.

Liquidity and Capital Resources

The Company has traditionally been reliant on funding from its equity offerings and from interest income on its cash balances. In June 2020, the Company earned $10 in license revenue pursuant to the License Agreement with Medtronic. In October 2020, the Company received an additional $10 million license payment associated with the completion of Medtronic Milestones 1 and 2, pursuant to the Development Agreement. The Company will become eligible to receive additional payments totaling up to $21 million following the successful completion of Medtronic Milestones 3 and 4 forecasted for the second and third quarters of 2021, respectively. The Company estimates that it currently has sufficient cash to fund its current development plan for its Enos System Milestones 3 through 9 of the table noted under "*Development Plan*".

During the year ended December 31, 2020, the Company raised aggregate gross proceeds of approximately $23,260,783 from financings ($20,976,485 net of closing costs and cash commissions), $2,492,727 from the exercise of 7,257,252 warrants, $189,464 from the exercise of 596,210 of broker warrants and $1,150 from the conversion of 11,500,000 common share equivalents. The Company also received a loan from the Medtronic Lender in the amount of $1,500,000 evidenced by an 8% senior secured promissory note.

The Company had cash and cash equivalents on hand of $25,468,805 and accounts payable and accrued liabilities, including the current portion of the lease liability and the note payable, of $6,580,155, excluding warrant liability at December 31, 2020, compared to $814,492 and $11,433,967 respectively, at December 31, 2019. The Company's working capital deficit at December 31, 2020, was $15,948,652 compared to a working capital deficit of $13,305,969, at December 31, 2019. Excluding the non-cash warrant liability, the working capital would have been $20,368,029, compared to a working capital deficit of $9,684,525 at December 31, 2019.

The Company has the following contractual obligations:

Contractual Obligations existing at the date of this MD&A	**Total $**	**Less than 1 year**	**1 – 3 years**	**4 – 5 years**	**After 5 years**
Lease liability	916,560	165,772	646,477	104,310	-
Note payable [(1)]	1,897,700	1,897,700	-	-	-
Supplier Agreement	1,500,000	1,500,000	-	-	-
Purchase order commitments	10,390,483	10,390,483	-	-	-
Total Contractual Obligations	**14,704,743**	**13,953,955**	**646,477**	**104,310**	**-**

Note:

1. On April 28, 2020, the Company issued the Note to an affiliate of Medtronic for the Medtronic Loan and executed and delivered the Security Agreement. The Note is in the principal amount of $1.5 million plus $296,046 equal to certain legal, transaction and intellectual property related expenses incurred by Medtronic pursuant to the Medtronic agreements plus $101,654 of accrued interest to January 31, 2021. See "*Recent Developments*".

The table below sets forth the Company's warrants (by series) that were previously issued, and which remain outstanding as of February 20, 2021.

	Issue Date	Expiry Date	Number Issued	Number Outstanding	Exercise Price US $	Exercise Price CDN $
TMD.W.T.H	31-Mar-16	31-Mar-21	501,831	501,831		36.00
TMD.W.T.H	14-Apr-16	31-Mar-21	75,275	75,275		36.00
TMD.W.T.I	20-Sep-16	20-Sep-21	569,444	569,444		22.50
TMD.W.T.I	27-Oct-16	20-Sep-21	67,667	67,667		22.50
Not Listed	16-Mar-17	16-Mar-21	357,787	355,253		15.00
Not Listed	29-Jun-17	29-Jun-22	1,612,955	75,810		6.00
Not Listed	21-Jul-17	29-Jun-22	370,567	370,567		6.00
Not Listed	24-Aug-17	24-Aug-22	563,067	563,067		6.00
Not Listed	5-Dec-17	5-Dec-22	1,533,333	1,533,333		18.00
Not Listed	10-Apr-18	10-Apr-23	1,126,665	1,126,665		10.50
Not Listed	10-May-18	10-Apr-23	168,889	168,889		10.50
Not Listed[1]	10-Aug-18	10-Aug-23	7,679,574	6,661,068	2.9200	
Not Listed[2]	21-Mar-19	21-Mar-24	8,455,882	8,455,882	3.9500	
Not Listed	27-Mar-20	27-Mar-25	3,500,000	-	0.1900	
Not Listed	6-May-20	6-Nov-25	2,757,252	-	0.3002	
Not Listed	10-Jun-20	10-Jun-24	9,000,000	-	1.0000	
Not Listed	26-Jan-21	26-Jan-26	3,709,677	3,126,427	2.0000	
			42,049,865	**23,651,178**		

Note 1 - Includes a ratchet clause triggered August 29, 2019 lowering the exercise price from $3.20 to $2.92.
Note 2 - Includes a ratchet clause triggered August 29, 2019 lowering the exercise price from $4.00 to $3.95.

Offerings During 2020

June 2020 Financing

On June 10, 2020, the Company completed a registered offering of 6,500,000 Common Shares, 11,500,000 common share equivalents (each, a "June 2020 Common Share Equivalent") and 9,000,000 Common Share purchase warrants (each a "June 2020 Common Warrant") for total gross proceeds of approximately $18,000,000 ($16,500,000 net of closing cash costs including cash commissions described below). The Common Shares, June 2020 Common Share Equivalents and June 2020 Common Warrants were sold in fixed combinations at an offering price of $1.00, consisting of one Common Share and one-half June 2020 Common Warrant or one June 2020 Common Share Equivalent and one-half June 2020 Common Warrant. Each June 2020 Common Warrant is exercisable to purchase one Common Share at an exercise price of $1.00 per Common Share prior to expiry on June 10, 2024. Each June 2020 Common Share Equivalent is convertible to one Common Share at a conversion price of $0.0001 and will expire when exercised in full.

Pursuant to the placement agent agreement entered into in respect of the offering, in addition to the cash commission of $1,260,000, broker warrants were issued to the placement agent which entitle the holder to purchase 1,260,000 Common Shares at an exercise price of $1.25 per share prior to expiry on June 10, 2024.

May 2020 Financing

On May 6, 2020, the Company completed a registered direct offering of 5,514,50 Common Shares of the Company at an offering price of $0.36268 per Common Shares and 2,757,252 unregistered Common Shares purchase warrants (each, a "May 2020 Warrant"), resulting in gross proceeds of $2,000,000 ($1,575,167 net of closing cash costs including cash commission described below). Each May 2020 Warrant is exercisable to purchase one Common Share at an exercise price of $0.3002 per Common Shares for a period of five and one-half (5.5) years following the date of closing of the offering.

Pursuant to the placement agency agreement entered into in respect of the offering, in addition to the cash commission of $140,000, broker warrants were issued to the placement agent which entitle the holder to purchase 386,015 Common Shares at a price of $0.45335 per share prior to expiry on November 6, 2025.

Senior Secured Loan from Medtronic

On April 28, 2020, the Company received gross proceeds of $1.5 million from the Medtronic Loan from an affiliate of Medtronic evidenced by the Note and secured by way of the Security Agreement executed and delivered by the Company in favor of the Medtronic Lender. The Note, which was amended and restated on June 3, 2020, matures on June 3, 2023, and the unpaid principal balance owing under the Note, together with any accrued and unpaid interest and all other unpaid obligations under the Note, shall be due and payable in full on the earliest to occur of: (i) June 3, 2023, (ii) a Change of Control (as defined in the Note), or (iii) the completion of the last milestone under the Development Agreement. Please also see above under "*Recent Developments – Development and License Arrangements with Medtronic and Senior Secured Loan*".

March 2020 Financing

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 at a per share purchase price of $0.17 per Common Share and 3,500,000 Common Share purchase warrants (each, a "March 2020 Warrant"),, resulting in total gross proceeds of approximately $1.2 million ($0.862 million net of closing cash costs including cash commission described below). Each March 2020 Warrant is exercisable to purchase one Common 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 $475,300 based on the value determined by the Black-Scholes model and the balance of $714,700 was allocated to Common Shares.

Pursuant to the placement agency agreement entered into in respect of the offering, in addition to the cash commission of $83,300, broker warrants were issued to the placement agent which entitle the holder to purchase 490,000 Common Shares at a price of $0.2125 per share prior to expiry on March 27, 2025.

December 2019 Common Share Purchase Agreement

From January 3, 2020 to the date of this report, the Company raised $2,071,930 through the sale of 4,408,048 Common Shares to an investor in accordance with the terms of a common share purchase agreement dated December 23, 2019, between the Company and the investor, under which the investor committed to purchase up to $35.0 million of Common Shares of Titan. Under the December 2019 Common Share Purchase Agreement, the balance remaining on Aspire's commitment is 4,348,729 Common Shares (wih maximum value of $32.9 million), at the Company's request from time to time, until June 23, 2022, subject to the terms and conditions of the agreement.

Share issuance to Contract Development Firm

On January 3, 2020, a development firm engaged by the Company purchased from the Company 501,148 Common Shares at a price of $0.50 per share and the purchase price was satisfied by way of the development firm setting off $250,574 owing the Company to the development firm for services it had previously rendered.

Comparison of Anticipated versus Actual Use of Proceeds from Financings

The following table sets forth the variances, if any, between the anticipated and actual use of proceeds from the Company's financings completed in the 2020 Fiscal Year.

Date of Financing	Anticipated Use of Proceeds	Actual Use of Proceeds
March 25, 2020	General corporate purposes including resuming the development of the single access robotic surgical system, instruments, and accessories; funding working capital (including the reduction of outstanding payables); and capital expenditures.	As anticipated.
May 6, 2020	General corporate purposes including resuming the development of the single access robotic surgical system, instruments, and accessories; funding working capital (including the reduction of outstanding payables); and capital expenditures.	As anticipated.
June 10, 2020	General corporate purposes including resuming the development of the single access robotic surgical system, instruments, and accessories; funding working capital (including the reduction of outstanding payables); and capital expenditures.	As anticipated. The majority of the proceeds are still available for future periods. The Company does not anticipate alternative use of these proceeds.

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 February 20, 2021:

Type of Securities	**Number of Common Shares issued or issuable upon conversion**
Common Shares	99,939,390
Stock options(1)	2,894,392
Warrants	23,651,178
Broker warrants(2)	1,918,695

Notes:

(1) The Company has outstanding options enabling certain employees, directors, officers, and consultants to purchase Common Shares:

- 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.
- On July 30, 2020, the Company issued 22,425 stock options with an exercise price of CDN $1.266 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years.
- On July 30, 2020, the Company issued 1,350,000 stock options with an exercise price of US $0.962 to certain employees for services rendered. These options vest 25% annually over four years.
- On September 29, 2020, the Company issued 27,304 stock options with an exercise price of CDN $0.96 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years.
- On September 29, 2020, the Company issued 19,568 stock options with an exercise price of US $0.73 to a director in exchange for services rendered. The options vest immediately and have a contractual life of 7 years. Subsequent to December 31, 2020, these options were exercised.
- On September 30, 2020, the Company issued 4,723 stock options with an exercise price of US $0.745 to a consultant. The options vest immediately and have a contractual life of 3 years.
- On December 10, 2020, the Company issued 623,000 stock options with an exercise price of US $1.31 and 4,000 stock options with an exercise price of CDN $1.70 to certain employees for services rendered. These options vest annually over four years and have a contractual life of 7 years.

(2) A total of 1,918,695 broker warrants previously issued in connection with offerings of securities by the Company in March 2019, March 2020, May 2020, June 2020 and January 2021 offerings remain outstanding:

- 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.
- Pursuant to the agency agreement in respect of the March 2020 offering, in addition to the cash commission paid to the agents, 490,000 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one common share at the price of US $0.2125 for a period of 5 years following the closing date.
- Pursuant to the agency agreement in respect of the May 2020 offering, in addition to the cash commission paid to the agents, 386,015 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one common share at the price of US $0.4534 for a period of five and one half (5.5) years following the closing date.
- Pursuant to the agency agreement in respect of the June 2020 offering, in addition to the cash commission paid to the agents, 1,260,000 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one common share at the price of US $1.25 for a period of four years following the closing date.
- Pursuant to the January 2021 Offering, in addition to the cash commission paid to the agents, 519,354 broker warrants were issued to the agents. Each broker warrant entitles the holder thereof to acquire one common share at the price of US $1.9375 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, 2020 including the comparative information presented in the audited financial statements for the year ended December 31, 2019.

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. At December 31, 2020, the Company had a shareholders' deficiency of $13,809,492 and current year losses of $24,184,657.

The Company currently does not generate any revenue (other than from its agreements with Medtronic, see "*Recent Developments – Development and License Arrangements with Medtronic and Senior Secured Loan*" and 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) incremental borrowing rate used to measure lease liabilities, (b) the fair value estimate of the measurement of lease, warrant liabilities and note payable, and (c) the assessment of the Company's ability to meet its obligations as they come due. While management believes that the estimates and assumptions are reasonable, actual results may differ.

(a) Revenue recognition

The Company currently recognizes revenue when it has persuasive evidence of a contract, performance obligations have been identified and satisfied, payment terms have been identified, and it is probable that the Company will collect the consideration it is entitled to. On June 3, 2020, the Company entered into a License Agreement with a U.S. affiliate of Medtronic, whereby the Company is providing exclusive access to certain intellectual property rights relating to robotic assisted surgical technologies. The Company is accounting for the license fee at the point in time when the rights were transferred.

- Revenue from the License Agreement for intellectual property rights and know-how ("Royalty Payment") is recognized when rights are granted, and customer acceptance is established. Compensation received for the performance of technology transfer services relating to the License Agreement is accounted for separately from the Royalty Payment and will be recognized at the time the service is performed.
- Revenue from the Development Agreement and the allocation of ownership and license rights developed under each milestone is recognized when the rights are granted, and customer acceptance is established.
- Under the terms of the Development Agreement, payment is dependent on when the customer confirms completion of each milestone as defined. Due to the uncertainty of milestone achievements and entitlement of payments, the Company recognizes revenue only upon acceptance by the customer of work performed and the milestone achieved.

(b) 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.

(c) 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 (US dollar), or b) as with the warrants issued March 21, 2019, March 2020 and June 2020 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, 2020, 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, 2020, 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 fair value, 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, 2020

Warrants Exercised

Since December 31, 2020, and up to and including February 20, 2021, the Company has received $9,978,557 from the exercise of 8,583,250 warrants and 732,375 broker warrants. No material transaction relating to the exercise of warrants has occurred from February 20, 2021 to the date of this filing.

Options Exercised

On February 17, 2021, the Company received $14,285 on the exercise of 19,568 options.

February 2021 Equity Offering

On February 3, 2021, the Company entered into an underwriting agreement in respect of a "bought deal" offering of 8,335,000 units of the Company ("February 2021 Units") at price of $2.40 per February 2021 Unit (the "Offering Price") for aggregate gross proceeds of $20,004,000 ($18,334,512 net of closing costs) (the "February 2021 Offering"). Each February 2021 Unit consists of one Common Share and one half (1/2) of one Common Share purchase warrant (each whole warrant, a "February 2021 Warrant"). Each February 2021 Warrant will be exercisable to acquire one Common Share at an exercise price of $3.00 per share for a period of 24 months after the closing date. Pursuant to the underwriting agreement, the underwriter will receive: (i) a cash fee equal to 7% of the gross proceeds of the offering, (including February 2021 Units sold pursuant to the exercise of the overallotment option), and (ii) a number of broker warrants equal to 7% of the total number of February 2021 Units sold in the offering (including units sold pursuant to the exercise of the over-allotment option), each entitling the holder to acquire one Common Share at $3.00 for a period of 24 months after the closing date. The Company has granted the underwriter an option, exercisable in whole or in part and from time to time at any time until 30 days after the closing of the offering, to purchase up to an additional number of units equal to 15% of the number of February 2021 Units sold pursuant to the offering at the offering price. The Offering is expected to close on or about February 24, 2021.

A condition of the February 2021 Underwriting Agreement restricts the Company from issuing, without prior agreement from the underwriter, any Common Shares, or any securities convertible into or exchangeable for or exercisable to acquire Common Shares for a period commencing on the date of the February 2021 Underwriting Agreement and ending ninety (90) days following the closing date, except under pre-existing rights or obligations. This would include restricting the issuance of shares under another previously signed purchase agreement (see the December 2019 Common Share Purchase Agreeement above).

The net proceeds from the February 2021 Offering will be used to fund the development of the Company's robotic surgical technologies and for general working capital.

January 2021 Equity Offering

On January 26, 2021, the Company closed an offering of 6,451,613 units of the Company ("January 2021 Units") sold on a "bought deal" basis, at price of $1.55 per January 2021 Unit for aggregate gross proceeds of $10,000,000 (the "January 2021 Offering"). The underwriter also exercised its over-allotment option for an additional 967,741 January 2021 Units and additional gross proceeds of $1,500,000. Each January 2021 Unit consists of one Common Share and one half (1/2) of one Common Share purchase warrant (each whole warrant, a "January 2021 Warrant"). Each January 2021 Warrant is exercisable to acquire one Common Share at an exercise price of $2.00 per share until January 26, 2026. Pursuant to the underwriting agreement, the underwriter received: (i) a cash fee equal to 7% of the gross proceeds of the offering, (including January 2021 Units sold pursuant to the exercise of the overallotment option), and (ii) a number of broker warrants equal to 7% of the total number of January 2021 Units sold in the offering (including units sold upon exercise of the over-allotment option), each entitling the holder to acquire one Common Share at $1.9375 for a period of 24 months after the closing date.

Outlook

During the year ended December 31, 2020, the Company earned revenue and secured capital in an amount to enable it to resume product development. Since December 31, 2020, the Company has secured additional capital to allow it to meet its current obligations and complete product development and regulatory plans for its Enos system through the end of 2021. The Company is expecting to secure additional capital upon completion of the Februrary 2021 offering.

The Company now has sufficient cash on hand to meet all its current obligations as they become due, including its obligations under the Development Agreement, the Licence Agreement and the Medtronic Loan and is expected to satisfy its current development plan for its Enos System Milestones 3 through 9 of the table noted under "*Development Plan*".

With its current financial resources and assuming the Company does not receive payments for the completion of Medtronic Milestones 3 and 4, yet incurs the costs associated with Medtronic Milestone 3, the Company currently has sufficient capital on hand to complete Milestones 3 through 9 of the table noted under "*Development Plan*".

With its current financial resources and the net proceeds to be received from the February 2021 Offering, and assuming the Company does not receive payments for the completion of Medtronic Milestones 3 and 4, yet incurs the costs associated with Medtronic Milestone 3, the Company expects to be able to continue operations for 16 months and complete Milestones 3 through 14.

If the Company achieves Medtronic Milestones 3 and 4 and receives the payments from Medtronic in respect of those milestones, with the Company's current financial resources and the net proceeds from the February 2021 Offering, the Company expects to have the financial resources to be able to continue operations for 22 months and complete Milestones 3 through 16.

Over the course of the next twelve months, the Company expects to implement improvements to its instruments, end-effectors and cameras, and related modifications to the central unit of the patient cart, and complete software development for its Enos system. In addition, the Company intends to confirm with the FDA the relevant regulatory pathway through the Pre-Submission process, and initiate planning for the implementation of its IDE clinical studies.

Additional information relating to the Company, including Titan's Annual Report for the 2020 fiscal year, is available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov.

Exhibit 99.4

CERTIFICATION

I, David McNally, certify that:

1. I have reviewed this annual report on Form 40-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: March 31, 2021

By: *<u>/s/ David McNally</u>*
David McNally
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 99.5

CERTIFICATION

I, Monique L. Delorme, certify that:

1. I have reviewed this annual report on Form 40-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: March 31, 2021

By: *<u>/s/ Monique L. Delorme</u>*
Monique L. Delorme
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 99.6

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 Form 40-F for the period ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David McNally, President and 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.

March 31, 2021

/s/ David McNally
David 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 99.7

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 Form 40-F for the period ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Monique L. Delorme, 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.

March 31, 2021

/s/ Monique L. Delorme
Monique L. Delorme
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.

Exhibit 99.8

Consent of Independent Registered Public Accounting Firm

Titan Medical Inc.
Toronto, Canada

We hereby consent to the use of our report dated February 20, 2021, on the financial statements of Titan Medical Inc. (the "Company") for the years ended December 31, 2020 and 2019 included in this annual report on Form 40-F.

We also consent to the incorporation by reference of such reports into the Company's Registration Statements on Form F-3 (File No. 333-232898 and File No. 333-238830), and Registration Statements on Form S-8 (File No. 333-229612 and File No. 333-240018).

/s/ BDO Canada LLP
BDO Canada LLP
Toronto, Canada
March 31, 2021